



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

02/05/03

CERTIFIED MAIL

RE: Final Title V Chapter 3745-77 permit

02-78-00-0463

WCI Steel, Inc.
Thomas O. Shepker
1040 Pine Ave. SE
Warren, OH 44883-6528

Dear Thomas O. Shepker:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street
Room 300
Columbus, Ohio 43215

If you have any questions, please contact Northeast District Office.

Very truly yours,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: Northeast District Office
File, DAPC PMU



State of Ohio Environmental Protection Agency

FINAL TITLE V PERMIT

Issue Date: 02/05/03

Effective Date: 02/26/03

Expiration Date: 02/26/08

This document constitutes issuance of a Title V permit for Facility ID: 02-78-00-0463 to:

WCI Steel, Inc.
1040 Pine Ave., S.E.
Howland/Weathersfield/Warren, OH 44883-6528

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

Table with 3 columns: Emissions Unit ID (Company ID), Emissions Unit Activity Description, and Emissions Unit Description. Rows include units like B001 (No. 1 Boiler), F001 (Roadways and Parking Areas), and P005 (54" Tandem Mill No. 42).

P040 (54" Temper Mill)
Single Stand 4-High Cold Rolling Mill

P901 (Blast Furnace)
Coke-fired blast furnace includes charging, stoves, waste gas flare, furnace upsets, tapping from two casthouses (w/baghouse) and slag pit.

P902 (BOF Vessel #1)
Koppers Co. Basic Oxygen Furnace, includes: charging, refining/melting, tapping, slag splashing, tire/coal injection and deslagging.

P903 (BOF Vessel #2)
Koppers Co. Basic Oxygen Furnace, includes: charging, refining/melting, tapping, slag splashing, tire/coal injection and deslagging.

P905 (Blst Fce Pellet Ore Rcvng and Handling)
Pellet ore unloading, transfer and screening prior to blast furnace charging (vented to 3 baghouses).

P906 (No. 2 Galvanizing Line)

Wean Engineering continuous galvanizing line with coil welder, acid cleaning section, flux application, Ajax Magnothermic galvanizing kettle and N-G fired preheaters.

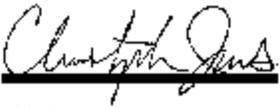
R001 (56" Hot Mill Roll Shop Cleaning Booth)
Roll shop maintenace cleaning booth utilizing mineral spirits.

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330) 425-9171

OHIO ENVIRONMENTAL PROTECTION AGENCY



Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. *State and Federally Enforceable Section*

1. **Monitoring and Related Record Keeping and Reporting Requirements**

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

- c. The permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

 - ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**
 - (a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (ii) the probable cause of such deviations; and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, the written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and

duration of each deviation. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i), (ii) and (iii))

- (b) Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(iii))

- iii. **For monitoring, record keeping, and reporting requirements:** Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year, for the previous six calendar months. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting

requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

- iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions unit(s) or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

(Authority for term: OAC rule 3745-77-07(A)(5))

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

(Authority for term: OAC rule 3745-77-07(A)(6))

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Authority for term: OAC rule 3745-77-07(A)(7))

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

(Authority for term: OAC rule 3745-77-07(A)(8))

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.
(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

(Authority for term: OAC rule 3745-77-07(B))

12. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

- ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - ii. Compliance certifications shall include the following:
 - (a) An identification of each term or condition of this permit that is the basis of the certification.
 - (b) The permittee's current compliance status.
 - (c) Whether compliance was continuous or intermittent.
 - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
 - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

13. Permit Shield

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

(Authority for term: OAC rule 3745-77-07(G))

16. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in

emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(For purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)

(Authority for term: OAC rule 3745-77-07(I))

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

18. Insignificant Activities

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

19. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

(Authority for term: OAC rule 3745-77-07(A)(1))

B. *State Only Enforceable Section*

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

2. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

3. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

4. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

5. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

6. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

1. Nitrogen Oxides (NOx) Budget Trading Program

OAC Chapter 3745-14

1.a In restating the applicable requirements of this Chapter, it is not the Agency's intent to make these requirements, in any way, more stringent than the rules.

1.b The following regulated non-electric generating units are subject to the applicable requirements specified in OAC Chapter 3745-14 and the annual NOx allowance allocations listed below:

Annual NOx Allowance for the Control Periods in Years 2004 through 2007

Emissions Unit

B001 - Boiler #1	111
B002 - Boiler #2	29
B004 - Boiler #3	140

1.c Each emissions unit identified in Section A.1.b above is a NOx budget unit under OAC rule 3745-14-01(C)(1). [OAC rule 3745-14-01(C)(1)(b)(i)]

1.d The NOx authorized account representative shall submit a complete NOx budget permit application in accordance with the deadlines specified in paragraphs (B)(2) and (B)(3) of OAC rule 3745-14-03. The NOx authorized account representative shall also submit, in a timely manner, any supplemental information that the Director determines is necessary in order to review a NOx budget permit application and issue or deny a NOx budget permit. [OAC rules 3745-14-01(E)(1)(a)(i), 3745-14-01(E)(1)(a)(ii), and 3745-14-03(B)(1)]

1.e Beginning 2004, the owners and operators of each NOx budget source and each NOx budget unit at the source shall hold NOx allowances available for compliance deductions under paragraph (E) of OAC rule 3745-14-06, as of the NOx allowance transfer deadline, in the unit's compliance account and the source's overdraft account combined in an amount not less than the total NOx emissions for the control period from the unit, as determined in accordance with OAC rule 3745-14-08, plus any amount necessary to account for actual utilization under paragraph (C)(5) of OAC rule 3745-14-05 for the control period. [OAC rules 3745-14-01(E)(3)(a) and 3745-14-01(E)(3)(c)]

1.f NOx allowances shall be held in, deducted from, or transferred among NOx allowance tracking system accounts in accordance with OAC rules 3745-14-05, 3745-14-06, 3745-14-07, and 3745-14-09. [OAC rule 3745-14-01(E)(3)(d)]

1.g A NOx allowance shall not be deducted, in order to comply with the requirement under paragraph (E)(3)(a) of OAC rule 3745-14-01, for a control period in a year prior to the year for which the NOx allowance was allocated. [OAC rule 3745-14-01(E)(3)(e)]

1.h Each ton of NOx emitted in excess of the NOx budget emission limitation, as defined in OAC rule 3745-14-01(B)(2)(yy), shall constitute a separate violation of OAC Chapter 3745-14, the Clean Air Act, and applicable Ohio law. The owners and operators of a NOx budget unit that has excess emissions in any control period shall surrender the NOx allowances required for deduction under paragraph (E)(4)(a) of OAC rule 3745-14-06 and pay any fine, penalty, or assessment or comply with any other remedy imposed under paragraph (E)(4)(c) of OAC rule 3745-14-06. [OAC rules 3745-14-01(E)(3)(b), 3745-14-01(E)(4)(a) and 3745-14-01(E)(4)(b)]

A. State and Federally Enforcable Section (continued)

1.i When recorded by the Administrator pursuant to OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NOx allowance to or from a NOx budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NOx budget permit of the NOx budget unit by operation of law without any further review.
[OAC rule 3745-14-01(E)(3)(h)]

1.j Except as provided below, the Director shall revise the NOx budget permit, as necessary, in accordance with OAC rule 3745-77-08.

Each NOx budget permit is deemed to incorporate automatically the definitions of terms under paragraph (B) of OAC rule 3745-14-01 and, when recorded by the Administrator, in accordance with OAC rules 3745-14-06 and 3745-14-07, every allocation, transfer, or deduction of a NOx allowance to or from the compliance accounts of the NOx budget units covered by the permit or the overdraft account of the NOx budget source covered by the permit.

[OAC rules 3745-14-03(D)(2) and 3745-14-03(E)(1)]

1.k The owner or operator of a NOx budget unit shall comply with the following prohibitions under OAC rule 3745-14-08(A)(5):

i. No owner or operator of a NOx budget unit shall use any alternative monitoring system, alternative reference method, or any other alternative for the required continuous emission monitoring system without having obtained prior written approval in accordance with OAC rule 3745-14-08(F).

ii. No owner or operator of a NOx budget unit shall operate the unit so as to discharge, or allow to be discharged, NOx emissions to the atmosphere without accounting for all such emissions in accordance with the applicable provisions of this rule and 40 CFR Part 75 except as provided in 40 CFR 75.74.

iii. No owner or operator of a NOx budget unit shall disrupt the continuous emission monitoring system, any portion thereof, or any other approved emission monitoring method, and thereby avoid monitoring and recording NOx mass emissions discharged into the atmosphere, except for periods of recertification or periods when calibration, quality assurance testing, or maintenance is performed in accordance with the applicable provisions of this rule and 40 CFR Part 75 except as provided in 40 CFR 75.74.

iv. No owner or operator of a NOx budget unit shall retire or permanently discontinue use of the continuous emission monitoring system, any component thereof, or any other approved emission monitoring system, except under any one of the following circumstances:

A. during the period that the unit is covered by an exemption under paragraphs (C)(2) and (D) of OAC rule 3745-14-01 of this Chapter that is in effect;

B. the owner or operator is monitoring emissions from the unit with another certified monitoring system approved by the Director, in accordance with the applicable provisions of this rule and 40 CFR Part 75, for use at that unit that provides emission data for the same pollutant or parameter as the retired or discontinued monitoring system; or

C. the NOx authorized account representative submits notification of the date of certification testing of a replacement monitoring system for the retired or discontinued monitoring system in accordance with OAC 3745-14-08(B)(2)(b).

[OAC rule 3745-14-08(A)(5)]

A. State and Federally Enforcable Section (continued)

- 1.l** The owners and operators of the NOx budget unit shall keep on site at the source each of the following documents for a period of five years from the date the document is created: (This period may be extended for cause, at any time prior to the end of five years, in writing by the Director or Administrator.)
- i. the account certificate of representation for the NOx authorized account representative for the NOx budget unit and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with paragraph (D) of OAC rule 3745-14-02, provided that the certificate and documents shall be retained on site at the source beyond such five-year period until such documents are superseded because of the submission of a new account certificate or representation changing the NOx authorized account representative;
 - ii. all emission monitoring information, in accordance with OAC rule 3745-14-08(E);
 - iii. copies of all reports, compliance certifications, and other submissions and all records made or required under the NOx budget trading program; and
 - iv. copies of all documents used to complete a NOx budget permit application and any other submission under the NOx budget trading program or to demonstrate compliance with the requirements of the NOx budget trading program.
[OAC rule 3745-14-01(E)(5)(a)(i) through (iv)]

- 1.m** The permittee shall operate and maintain equipment to continuously monitor and record nitrogen oxides emissions from these emissions units in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 75.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software. This includes all systems required to monitor the NOx emission rate, NOx concentration, heat input rate, and stack flow rate, in accordance with 40 CFR Parts 75.71 and 75.72.

The permittee shall comply with the initial and re-certification procedures of 40 CFR Part 75. The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous nitrogen oxides monitoring system has been certified in accordance with 40 CFR Part 75. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous nitrogen oxides monitoring system: emissions of nitrogen oxides in lb/mmBtu actual heat input on an hourly average basis, emissions of nitrogen oxides in lbs/hr, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

Whenever the monitoring system fails to meet the quality assurance or data validation requirements of 40 CFR Part 75, data shall be substituted using the applicable procedures in Subpart D, Appendix D, or Appendix E of 40 CFR Part 75.

[OAC rules 3745-14-01(E)(2)(a), 3745-14-01(E)(5)(a)(ii), 3745-14-08(A)(2)(a) through (A)(2)(d), 3745-14-08(B)(1), and 3745-14-08(C)(1)]

- 1.n** The owner or operator of a unit that is not subject to an Acid Rain emissions limitation shall comply with the requirements of 40 CFR 75.62, except that the monitoring plan is only required to include the information required by Subpart H of 40 CFR Part 75.
[OAC rule 3745-14-08(E)(2)(b)]
- 1.o** The NOx authorized account representative of the NOx budget unit shall submit the reports and compliance certifications required under the NOx budget trading program, including those under OAC rules 3745-14-04 and 3745-14-08, to the Director and Administrator.
[OAC rule 3745-14-01(E)(5)(b)]

A. State and Federally Enforcable Section (continued)

1.p Each submission under the NOx budget trading program shall be submitted, signed, and certified by the NOx authorized account representative for each NOx budget source on behalf of which the submission is made. Each such submission shall include the following certification statement by the NOx authorized account representative:

"I am authorized to make this submission on behalf of the owners and operators of the NOx budget sources or NOx budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
[OAC rules 3745-14-02(A)(5)]

1.q The NOx authorized account representative shall submit quarterly reports that include all of the data and information required in Subpart H of 40 CFR Part 75 for each NOx budget unit (or group of units using a common stack). These quarterly excess emission reports shall be submitted within one month following the end of a calendar quarter covered by the report [by July 31 and October 31 for ozone season reporting in accordance with OAC rule 3745-14-08(E)(4)(b)(ii)] and shall be submitted in the manner specified in Subpart H of 40 CFR Part 75 and 40 CFR Part 75.64.
[OAC rules 3745-14-08(E)(4)(b) and 3745-14-08(E)(4)(c)(ii)]

1.r The NOx authorized account representative shall submit to the Administrator a compliance certification in support of each quarterly report based on a reasonable inquiry of those persons with primary responsibility for ensuring that all of the unit's emissions are correctly and fully monitored. The compliance certification shall state that:

i. the monitoring data submitted were recorded in accordance with the applicable requirements of OAC rule 3745-14-08 and 40 CFR Part 75, including the quality assurance procedures and specifications; and

ii. for a unit with add-on NOx emission controls and for all hours where data are substituted in accordance with 40 CFR Part 75.34(a)(1), the add-on emission control were operating within the range of parameters listed in the quality assurance program under Appendix B of 40 CFR Part 75 and the substitute values do not systematically underestimate the NOx emissions.
[OAC rule 3745-14-08(E)(4)(d)(i) and (ii)]

1.s The NOx authorized account representative for a NOx budget unit shall submit written notice of monitoring system certification and re-certification test dates to the Director in accordance with 40 CFR Part 75.61. The NOx authorized account representative shall submit a certification application to the Administrator, U.S. EPA, Region V Office, and the Director within forty-five days after completing all initial or re-certification tests required under paragraph (B) of OAC rule 3745-14-08, including the information required under Subpart H of 40 CFR Part 75.
[OAC rules 3745-14-08(D) and 3745-14-08(E)(3)]

A. State and Federally Enforcable Section (continued)

1.t For each control period in which one or more NOx budget units at a source are subject to the NOx budget emission limitation, the NOx authorized account representative of the source shall submit to the Director and the Administrator, by November 30 of that year, a compliance certification report for each source covering all such units.

The NOx authorized account representative shall include the following elements in the compliance certification report, in a format prescribed by the Administrator, concerning each unit at the source and subject to the NOx budget emission limitation for the control period covered by the report:

- i. identification of each NOx budget unit;
- ii. at the NOx authorized account representative's option, the serial numbers of the NOx allowances that are to be deducted from each unit's compliance account under paragraph (E) of OAC rule 3745-14-06 for the control period;
- iii. at the NOx authorized account representative's option, for units sharing a common stack and having NOx emissions that are not monitored separately or apportioned in accordance with OAC rule 3745-14-08, the percentage of allowances that is to be deducted from each unit's compliance account under paragraph (E)(5) of OAC rule 3745-14-06; and
- iv. the compliance certification under paragraph (A)(3) of OAC rule 3745-14-04.
[OAC rules 3745-14-04(A)(1) and 3745-14-04(A)(2)]

1.u In the compliance certification report under Section A.1.t.iv above, the NOx authorized account representative shall certify, based upon reasonable inquiry of those persons with the primary responsibility for operating the source and the NOx budget units at the source in compliance with the NOx budget trading program, whether each NOx budget unit for which the compliance certification is submitted was operated during the calendar year covered by the report in compliance with the requirements of the NOx budget trading program applicable to the unit, including all the following:

- i. whether the unit was operated in compliance with the NOx budget emission limitation;
- ii. whether the monitoring plan that governs the unit has been maintained to reflect the actual operation and monitoring of the unit, and contains all information necessary to attribute NOx emissions to the unit, in accordance with OAC rule 3745-14-08;
- iii. whether all the NOx emissions from the unit, or group of units (including the unit) using a common stack, were monitored or accounted for through the missing data procedures and reported in the quarterly monitoring reports, including whether conditional data were reported in the quarterly reports in accordance with OAC rule 3745-14-08, and if conditional data were reported, the permittee shall indicate whether the status of all conditional data has been resolved and all necessary quarterly report resubmissions have been made; and
- iv. whether the facts that form the basis for certification under OAC rule 3745-14-08 of each monitor at the unit or group of units (including the unit) using a common stack, or for using an excepted monitoring method or alternative monitoring method approved under OAC rule 3745-14-08, if any, have changed.

If a change is required to be reported under Section A.1.u.iv above, specify the nature of the change, the reason for the change, when the change occurred, and how the unit's compliance status was determined subsequent to the change, including what method was used to determine emissions when a change mandated the need for monitor re-certification.

[OAC rule 3745-14-04(A)(3)]

1.v The NOx authorized account representative shall submit a complete NOx budget permit renewal application for the NOx budget source covering the NOx budget units at the source in accordance with paragraph (E) of OAC rule 3745-77-08.

[OAC rule 3745-14-03(B)(3)(a)]

A. State and Federally Enforcable Section (continued)

- 1.w** The emission measurements recorded and reported in accordance with OAC rule 3745-14-08 shall be used to determine compliance by the unit with the NO_x budget emission limitation under paragraph (E)(3) of OAC rule 3745-14-01.
[OAC rule 3745-14-01(E)(2)(b)]
- 1.x** The permittee shall develop and maintain a written quality assurance/quality control plan for each continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 75, Appendix B. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on-site and available for inspection during regular office hours.
[OAC rules 3745-14-08(A)(2)(c) and 3745-14-08(A)(2)(d)]
- 1.y** The NO_x authorized account representative of the NO_x budget units at this facility may submit a petition under 40 CFR 75.66 to the Director and the Administrator requesting approval to apply an alternative to any requirement of the NO_x Budget Trading Program.
[OAC rule 3745-14-08(F)(2)]
- 2.** The permittee may be subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD, and Integrated Iron and Steel, 40 CFR Part 63, Subpart FFFFF. U.S. EPA failed to promulgate these standards by May 15, 2002, the Maximum Achievable Control Technology (MACT) hammer date. In accordance with 40 CFR Part 63, Subpart B (40 CFR Parts 63.50 through 63.56), the permittee shall submit an application to revise the permit to include equivalent emission limitations as a result of a case-by-case MACT determination. The application shall be submitted in two parts. The deadline to submit the Part I application, as specified in 40 CFR Part 63.53, was May 15, 2002. (The permittee submitted the Part I application on May 14, 2002.)
- 3.** If the final NESHAP standard is not promulgated by the deadline specified by U.S. EPA, and if the permittee is a major source of HAP at this deadline, the permittee shall submit the Part II application as specified in 40 CFR Part 63.53. The Part II application shall be submitted within 60 days after the deadline to promulgate the respective standard or by May 15, 2003, whichever is later. It must contain the following information, unless otherwise specified by future U.S. EPA regulations:
- a. for a new affected source, the anticipated date of startup of operation;
 - b. the hazardous air pollutants (HAPs) emitted by each affected source in the relevant source category and an estimated total uncontrolled and controlled emission rate for HAPs from the affected source;
 - c. any existing federal, State, or local limitations or requirements applicable to the affected source;
 - d. for each affected emission point or group of affected emission points, an identification of control technology in place;
 - e. information relevant to establishing the MACT floor (or MACT emission limitation), and, at the option of the permittee, a recommended MACT floor; and
 - f. any other information reasonably needed by the permitting authority including, at the discretion of the permitting authority, information required pursuant to Subpart A of 40 CFR Part 63.

A. State and Federally Enforcable Section (continued)

The Part II application for a MACT determination may, but is not required to, contain the following information:

- a. recommended emission limitations for the affected source and support information (the permittee may recommend a specific design, equipment, work practice, or operational standard, or combination thereof, as an emission limitation);
- b. a description of the control technologies that would be applied to meet the emission limitation, including technical information on the design, operation, size, estimated control efficiency and any other information deemed appropriate by the permitting authority, and identification of the affected sources to which the control technologies must be applied; and
- c. relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.

4. If the NESHAP is promulgated before the Part II application is due for the relevant source category, and if the permittee is a major source of HAP when the NESHAP is promulgated, the permittee may be subject to the rule as an existing major source with a compliance date as specified in the NESHAP. If subject, the permittee shall submit the following notifications:

- a. Unless otherwise specified in the relevant Subpart, within 120 days after promulgation of a 40 CFR Part 63 Subpart to which the source is subject, the permittee shall submit an Initial Notification Report that contains the following information, in accordance with 40 CFR Part 63.9(b)(2):
 - i. the name and mailing address of the permittee;
 - ii. the physical location of the source if it is different from the mailing address;
 - iii. identification of the relevant MACT standard and the source's compliance date;
 - iv. a brief description of the nature, design, size, and method of operation of the source, and an identification of the types of emission points within the affected source subject to the relevant standard and the types of HAPs emitted; and
 - v. a statement confirming the facility is a major source for HAPs.
- b. Unless otherwise specified in the relevant Subpart, within 60 days following completion of any required compliance demonstration activity specified in the relevant Subpart, the permittee shall submit a notification of compliance status that contains the following information:
 - i. the methods used to determine compliance;
 - ii. the results of any performance tests, visible emission observations, continuous monitoring systems performance evaluations, and/or other monitoring procedures or methods that were conducted;
 - iii. the methods that will be used for determining continuous compliance, including a description of monitoring and reporting requirements and test methods;
 - iv. the type and quantity of HAPs emitted by the source, reported in units and averaging times in accordance with the test methods specified in the relevant Subpart;
 - v. an analysis demonstrating whether the affected source is a major source or an area source;
 - vi. a description of the air pollution control equipment or method for each emission point, including each control device or method for each HAP and the control efficiency (percent) for each control device or method; and
 - vii. a statement of whether or not the permittee has complied with the requirements of the relevant Subpart.

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

F003 - Boilerhouse coal handling
F023 - Continuous caster Tundish dumping and relining
F024 - Blast furnace casthouse baghouse dust handling
P004 - #1 Lee Wilson portable anneal unit
P030 - 56" mill heat retention box #1
P031 - 56" mill heat retention box #2
P041 - #2 Lee Wilson portable anneal unit
P042 - #3 Lee Wilson portable anneal unit
P043 - #4 Lee Wilson portable anneal unit
P044 - #5 Lee Wilson portable anneal unit
P045 - #6 Lee Wilson portable anneal unit
P046 - #7 Lee Wilson portable anneal unit
P047 - #8 Lee Wilson portable anneal unit
P048 - #9 Lee Wilson portable anneal unit
P049 - #10 Lee Wilson portable anneal unit
P050 - #11 Lee Wilson portable anneal unit
P051 - #12 Lee Wilson portable anneal unit
P052 - #13 Lee Wilson portable anneal unit
P053 - #14 Lee Wilson portable anneal unit
P054 - #15 Lee Wilson portable anneal unit
P055 - #16 Lee Wilson portable anneal unit
P056 - #17 Lee Wilson portable anneal unit
P057 - #18 Lee Wilson portable anneal unit
P058 - #19 Lee Wilson portable anneal unit
P059 - #20 Lee Wilson portable anneal unit
P060 - #21 Lee Wilson portable anneal unit
P061 - #22 Lee Wilson portable anneal unit
P062 - #23 Lee Wilson portable anneal unit
P063 - #24 Lee Wilson portable anneal unit
P064 - #25 Lee Wilson portable anneal unit
P065 - #26 Lee Wilson portable anneal unit
P066 - #27 Lee Wilson portable anneal unit
P067 - #28 Lee Wilson portable anneal unit
P068 - #29 Lee Wilson portable anneal unit
P069 - #30 Lee Wilson portable anneal unit

B. State Only Enforceable Section (continued)

- P070 - #31 Lee Wilson portable anneal unit
- P071 - #32 Lee Wilson portable anneal unit
- P072 - #33 Lee Wilson portable anneal unit
- P073 - #34 Lee Wilson portable anneal unit
- P074 - #35 Lee Wilson portable anneal unit
- P075 - #36 Lee Wilson portable anneal unit
- P076 - Spare Lee Wilson direct-fired portable anneal unit
- P077 - #1 Salem portable anneal unit
- P078 - #2 Salem portable anneal unit
- P079 - #3 Salem portable anneal unit
- P080 - #4 Salem portable anneal unit
- P081 - #5 Salem portable anneal unit
- P082 - #6 Salem portable anneal unit
- P083 - #7 Salem portable anneal unit
- P084 - #8 Salem portable anneal unit
- P085 - #9 Salem portable anneal unit
- P086 - #10 Salem portable anneal unit
- P087 - #11 Salem portable anneal unit
- P088 - #12 Salem portable anneal unit
- T007 - 56" mill 50,000-gallon tank containing waste oil
- T008 - 56" mill 500,000-gallon tank containing waste oil
- T009 - BOF shop 100,000-gallon tank for diesel fuel storage
- Z011 - Blast furnace emergency power generator
- Z012 - Bottle car refractory dryer
- Z017 - HSM 6000-gallon stoddard storage tank
- Z031 - Cold cleaners w/ surface areas <10 square feet (32)
- Z038 - Engineering building emergency generator

- Z040 - Boiler house bead blaster
- Z042 - No. 1 Ebner hydrogen anneal furnace
- Z043 - No. 2 Ebner hydrogen anneal furnace
- Z048 - No. 3 Ebner hydrogen anneal furnace
- Z049 - No. 2 galvanize line waste pickle liquor sump
- Z050 - No. 4 Ebner hydrogen anneal furnace
- Z051 - No. 5 Ebner hydrogen anneal furnace

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within a Permit to Install for the emissions unit.

B. State Only Enforceable Section (continued)

The following insignificant emissions units are located at this facility:

- F003 - Boilerhouse coal handling
- F023 - Continuous caster Tundish dumping and relining
- F024 - Blast furnace casthouse baghouse dust handling
- P004 - #1 Lee Wilson portable anneal unit
- P030 - 56" mill heat retention box #1
- P031 - 56" mill heat retention box #2
- P041 - #2 Lee Wilson portable anneal unit
- P042 - #3 Lee Wilson portable anneal unit
- P043 - #4 Lee Wilson portable anneal unit
- P044 - #5 Lee Wilson portable anneal unit
- P045 - #6 Lee Wilson portable anneal unit
- P046 - #7 Lee Wilson portable anneal unit
- P047 - #8 Lee Wilson portable anneal unit
- P048 - #9 Lee Wilson portable anneal unit
- P049 - #10 Lee Wilson portable anneal unit
- P050 - #11 Lee Wilson portable anneal unit
- P051 - #12 Lee Wilson portable anneal unit
- P052 - #13 Lee Wilson portable anneal unit
- P053 - #14 Lee Wilson portable anneal unit
- P054 - #15 Lee Wilson portable anneal unit
- P055 - #16 Lee Wilson portable anneal unit
- P056 - #17 Lee Wilson portable anneal unit
- P057 - #18 Lee Wilson portable anneal unit
- P058 - #19 Lee Wilson portable anneal unit
- P059 - #20 Lee Wilson portable anneal unit
- P060 - #21 Lee Wilson portable anneal unit
- P061 - #22 Lee Wilson portable anneal unit
- P062 - #23 Lee Wilson portable anneal unit
- P063 - #24 Lee Wilson portable anneal unit
- P064 - #25 Lee Wilson portable anneal unit
- P065 - #26 Lee Wilson portable anneal unit
- P066 - #27 Lee Wilson portable anneal unit
- P067 - #28 Lee Wilson portable anneal unit
- P068 - #29 Lee Wilson portable anneal unit
- P069 - #30 Lee Wilson portable anneal unit
- P087 - #11 Salem portable anneal unit
- P088 - #12 Salem portable anneal unit

B. State Only Enforceable Section (continued)

P070 - #31 Lee Wilson portable anneal unit
P071 - #32 Lee Wilson portable anneal unit
P072 - #33 Lee Wilson portable anneal unit
P073 - #34 Lee Wilson portable anneal unit
P074 - #35 Lee Wilson portable anneal unit
P075 - #36 Lee Wilson portable anneal unit
P076 - Spare Lee Wilson direct-fired portable anneal unit
P077 - #1 Salem portable anneal unit
P078 - #2 Salem portable anneal unit
P079 - #3 Salem portable anneal unit
P080 - #4 Salem portable anneal unit
P081 - #5 Salem portable anneal unit
P082 - #6 Salem portable anneal unit
P083 - #7 Salem portable anneal unit
P084 - #8 Salem portable anneal unit
P085 - #9 Salem portable anneal unit
P086 - #10 Salem portable anneal unit
P087 - #11 Salem portable anneal unit
P088 - #12 Salem portable anneal unit
T007 - 56" mill 50,000-gallon tank containing waste oil
T008 - 56" mill 500,000-gallon tank containing waste oil
T009 - BOF shop 100,000-gallon tank for diesel fuel storage
Z011 - Blast furnace emergency power generator
Z012 - Bottle car refractory dryer
Z017 - HSM 6000-gallon stoddard storage tank
Z031 - Cold cleaners w/ surface areas <10 square feet (32)
Z038 - Engineering building emergency generator

Z040 - Boiler house bead blaster
Z042 - No. 1 Ebner hydrogen anneal furnace
Z043 - No. 2 Ebner hydrogen anneal furnace
Z048 - No. 3 Ebner hydrogen anneal furnace
Z049 - No. 2 galvanize line waste pickle liquor sump
Z050 - No. 4 Ebner hydrogen anneal furnace
Z051 - No. 5 Ebner hydrogen anneal furnace

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within a Permit to Install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 1 Boiler (B001)
Activity Description: 492 MMBtu/Hr B&W fired with pulzd. coal, N-G, BFG and COG

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
492 mmBtu/hr boiler fired with coal, natural gas, blast furnace gas, and coke oven gas with a baghouse for controlling particulate emissions when burning coal	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)(1)	See A.I.2.a and A.I.2.c below.
	OAC rule 3745-17-10(C)(1)	See A.I.2.b below.
	OAC rule 3745-18-84(J)	Sulfur dioxide emissions shall not exceed 3.9 lbs/mmBtu actual heat input. See A.III.5 and A.III.6 below.

2. Additional Terms and Conditions

- 2.a Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input except when burning coal, when co-firing coal with any gaseous fuel, or when burning blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.
- 2.b Particulate emissions shall not exceed 0.10 pound per million Btu of actual heat input when burning coal or when co-firing coal with any gaseous fuels. This limit was obtained from curve P-1 in Figure I of OAC rule 3745-17-10 using a total heat input of 879 mmBtu/hr, which is the combined total heat input from emissions units B001 and B002.
- 2.c Particulate emissions shall not exceed 0.040 pound per million Btu of actual heat input when burning blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 8 inches of water while the emissions unit is in operation and is burning coal. The pressure drop shall not be considered outside the normal range when the pressure drop falls below the minimum point in the pressure differential range as a result of bag replacements.

The permittee may petition the Northeast District Office for reestablishment of the pressure drop range at any time provided the permittee can demonstrate to the Northeast District Office that the operating conditions upon which the pressure drop range was previously established are no longer applicable.

II. Operational Restrictions (continued)

2. The coal burned in this emissions unit shall have a sulfur content, on a dry basis, that is sufficient to comply with the allowable sulfur dioxide emission limitation of 3.9 pounds sulfur dioxide/mmBtu actual heat input.

Compliance with the above-mentioned specification shall be based upon the analytical results for the composite sample of coal collected during each calendar month.

3. The permittee shall burn only natural gas, coal, blast furnace gas, and coke oven gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall install, operate and maintain equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with all specifications outlined in 40 CFR Part 60, Appendix B, "Performance Specification Test (PST) 1", as such appendix existed on July 1, 2002. [OAC rule 3745-17-03(C)(1)] See A.VI.1.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain a certification letter from the Ohio EPA documenting that the continuous opacity monitoring system has been certified in accordance with the requirements of 40 CFR Part 60, Appendix B, "Performance Specification Test 1", as such appendix existed on July 1, 2002. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous opacity monitoring system: percent opacity on a 6-minute block average basis, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, operating manual(s), and/or the permittee's operational experience for similar sources. The permittee shall record the pressure drop across the baghouse on weekly basis when the emissions unit is operating.
3. The permittee shall collect a representative sample of each shipment of coal which is received for burning. The coal sampling shall be performed in accordance with ASTM method D2234, Collection of a Gross Sample of Coal. At the end of each calendar month, the representative samples of coal from all shipments of coal which were received during that calendar month shall be combined into one composite sample.

Each monthly composite sample of coal shall be analyzed for sulfur content (percent) and heat content (Btu/pound of coal). The analytical methods for sulfur content shall be the most recent version of: Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters, respectively. Alternative, equivalent methods may be used upon written approval from the appropriate Ohio EPA District Office or local air agency.

4. The permittee shall maintain monthly records of the total quantity of coal received, the results of the analyses for sulfur content and heat content, and the average sulfur dioxide emission rate for coal, recorded as pounds SO₂/MMBtu actual heat input.
5. Monitoring and record keeping for the sulfur content is not required for coke oven gas because the sulfur dioxide emission rate from the burning of undesulfurized coke oven gas is less than the allowable sulfur dioxide emission rate in Section A.I.1 of these terms and conditions.

III. Monitoring and/or Record Keeping Requirements (continued)

6. Monitoring and record keeping for the sulfur content is not required for blast furnace gas because the sulfur dioxide emission rate from the burning of blast furnace gas is less than the allowable sulfur dioxide emission rate in Section A.I.1 of these terms and conditions.
7. Monitoring and record keeping for the sulfur content is not required for natural gas because the sulfur dioxide emission rate from the burning of natural gas is less than the allowable sulfur dioxide emission rate in Section A.I.1 of these terms and conditions.
8. For each day during which the permittee burns a fuel other than natural gas, coal, blast furnace gas, and coke oven gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit reports (hardcopy or electronic format) following the end of each calendar quarter to the Ohio EPA, Northeast District Office documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07, detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective action(s) taken (if any) of each 6-minute block average above the applicable opacity limitation(s).

The reports shall also identify any excursions of the start-up and shutdown provisions specified in OAC rule 3745-17-07(A)(3) and document any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

2. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse was not within the allowable range specified above.
3. Quarterly reports shall be submitted concerning the analytical results of the composite coal samples and the quantities of the coal received for this emissions unit.

The quarterly reports shall include the following information for each month during the calendar quarter:

- a. the total quantity of coal received (tons);
- b. the average sulfur content (percent) of the coal received;
- c. the average heat content (Btu/pound) of the coal received; and
- d. the average sulfur dioxide emissions rate (pounds sulfur dioxide/mmBtu actual heat input) from the coal received.

These quarterly reports shall be submitted by January 31, April 30, July 31, and October 31 of each year, unless otherwise specified by the appropriate Ohio EPA District Office or local air agency, and shall cover the data obtained during the previous calendar quarters.

IV. Reporting Requirements (continued)

4. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas, coal, blast furnace gas, and/or coke oven gas was burned in this emissions unit.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

- 1.b Emission Limitation:

Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input except when burning coal, when co-firing coal with any gaseous fuel, or when burning blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

Applicable Compliance Method:

- (i) To determine the actual particulate emission rate for natural gas, the following equation may be used:

$$E \text{ (lb/mmBtu)} = (1.9 \text{ lb}/10^6 \text{ scf}) \times (1 \text{ scf}/1073 \text{ Btu}) \times (1,000,000 \text{ Btu}/\text{mmBtu}) = 0.0018 \text{ lb/mmBtu}$$

Where:

E = particulate emission rate from natural gas, in lb/mmBtu;

1.9 lb/10⁶ scf = emission factor for filterable particulate matter from burning natural gas, from AP42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1073 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

- (ii) To determine the particulate emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulate/mmBtu from AP42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

- (iii) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

V. Testing Requirements (continued)

1.c Emission Limitation:

Particulate emissions shall not exceed 0.10 pound per million Btu of actual heat input when burning coal or co-firing coal with any gaseous fuel.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.d Emission Limitation:

Particulate emissions shall not exceed 0.040 pound per million Btu of actual heat input when burning blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

Applicable Compliance Method:

(i) To determine the actual particulate emission rate for natural gas, the following equation may be used:

$$E \text{ (lb/mmBtu)} = (1.9 \text{ lb}/10^6 \text{ scf}) \times (1 \text{ scf}/1073 \text{ Btu}) \times (1,000,000 \text{ Btu}/\text{mmBtu}) = 0.0018 \text{ lb/mmBtu}$$

Where:

E = particulate emission rate from natural gas, in lb/mmBtu;

1.9 lb/10⁶ scf = emission factor for filterable particulate matter from burning natural gas, from AP42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1073 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the particulate emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulate/mmBtu from AP42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iii) The permittee may use a value of 0.015 lb particulate/mmBtu for the particulate emission rate for blast furnace gas. The value of 0.015 lb/mmBtu was obtained from emission testing on 10/21/91 of emissions unit B004 while burning only blast furnace gas.

(iv) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.e Emission Limitation:

Sulfur dioxide emissions shall not exceed 3.9 lbs/mmBtu actual heat input.

Applicable Compliance Method:

(i) The record keeping in Section A.III of these terms and conditions shall be used to determine compliance with the SO₂ emission limitation when burning solid fuels.

(ii) Testing for SO₂ from natural gas is not required because the sulfur dioxide emission rate from the burning of natural gas is less than the allowable sulfur dioxide emission rate in Section A.I.1 of these terms and conditions.

V. Testing Requirements (continued)

- (iii) Testing for SO₂ from coke oven gas is not required because the sulfur dioxide emission rate for burning undesulfurized coke oven gas is less than the allowable sulfur dioxide emission rate in Section A.I.1 of these terms and conditions.
- (iv) Testing for SO₂ from blast furnace gas is not required because it does not contain measurable quantities of sulfur compounds according to "Steam", 39th Edition, The Babcock & Wilcox Company, 1978, p.5-20, and "Air Pollution Engineering Manual", Air & Waste Management Association, 1992, p. 650.
- (v) If required, the permittee shall demonstrate compliance with this emission rate, while burning coal, in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.
- (vi) If required, the permittee shall demonstrate compliance with this emission rate, while burning natural gas, in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.
- (vii) If required, the permittee shall demonstrate compliance with this emission rate, while burning coke oven gas, in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.
- (viii) If required, the permittee shall demonstrate compliance with this emission rate, while burning blast furnace gas, in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after issuance of this permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limit for particulate matter.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60, Appendix A.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
 - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

3. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

VI. Miscellaneous Requirements

1. Within twelve months of the issuance of this permit, the permittee shall install equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit. Such continuous monitoring and recording equipment shall comply with all specifications outlined in 40 CFR Part 60, Appendix B, "Performance Specification Test (PST) 1", as such appendix existed on July 1, 2002. [OAC rule 3745-17-03(C)(1)]

In accordance with 40 CFR Part 51, Appendix P, and OAC rule 3745-17-03(C), the permittee was required to install equipment to continuously monitor and record the opacity of the visible particulate emissions from this emissions unit by January 31, 1998.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 Boiler (B002)

Activity Description: 387 MMBtu/Hr B&W fired with No. 6 F.O., N-G, BFG and COG and No. 6 fuel oil

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
387 mmBtu/hr boiler fired with natural gas, blast furnace gas, coke oven gas, and number 6 fuel oil	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-10(B)(1)	See A.I.2.a and A.I.2.b below.
	OAC rule 3745-18-84(J)	Sulfur dioxide emissions shall not exceed 1.6 lbs/mmBtu actual heat input.
	OAC rule 3745-17-10(C)	See A.I.2.c below.

2. Additional Terms and Conditions

- 2.a Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input except when burning blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.
- 2.b Particulate emissions shall not exceed 0.040 pound per million Btu of actual heat input when burning blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.
- 2.c Particulate emissions shall not exceed 0.13 lb/mmBtu of actual heat input when burning number 6 fuel oil or any mixture of number 6 fuel oil and other gaseous fuels.

II. Operational Restrictions

1. The permittee shall burn only natural gas, blast furnace gas, coke oven gas, and number 6 fuel oil in this emissions unit.
2. The quality of the oil burned in this emissions unit shall meet a sulfur content which is sufficient to comply with the allowable sulfur dioxide emission limitation of 1.6 pounds per million Btu of actual heat input.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, blast furnace gas, coke oven gas, and number 6 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

III. Monitoring and/or Record Keeping Requirements (continued)

2. Monitoring and record keeping for sulfur content is not required for blast furnace gas because the sulfur dioxide emission rate from the burning of blast furnace gas is less than the allowable sulfur dioxide emission rate in Section A.I.1 of these terms and conditions.
3. Monitoring and record keeping for sulfur content is not required for coke oven gas because the sulfur dioxide emission rate from the burning of coke oven gas is less than the allowable sulfur dioxide emission rate in Section A.I.1 of these terms and conditions.
4. Monitoring and record keeping for sulfur content is not required for natural gas because the sulfur dioxide emission rate from the burning of natural gas is less than the allowable sulfur dioxide emission rate in Section A.I.1 of these terms and conditions.
5. The permittee shall collect or require the oil supplier to collect a representative grab sample for each shipment of oil that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the analysis for sulfur content and heat content in accordance with the most recent versions of the following ASTM methods: ASTM method D4294, ASTM method D240, or ASTM method 6010 for sulfur content; and ASTM method D240 for heat content. Alternative, equivalent methods may be used upon written approval by the Ohio EPA Northeast District Office.
6. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/mmBtu). (The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).)

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas, blast furnace gas, coke oven gas, and/or number 6 fuel oil was burned in this emissions unit.
2. The permittee shall notify the Ohio EPA Northeast District Office in writing of any record which shows a deviation of the allowable sulfur dioxide emission limitation based upon the calculated sulfur dioxide emission rate for each shipment of oil. The notification shall include a copy of such record and shall be sent to the Ohio EPA Northeast District Office with the next quarterly deviation report due.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:

Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input except when burning blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

Applicable Compliance Method:

(i) To determine the actual particulate emission rate for natural gas, the following equation may be used:

$$E \text{ (lb/mmBtu)} = (1.9 \text{ lb}/10^6 \text{ scf}) \times (1 \text{ scf}/1073 \text{ Btu}) \times (1,000,000 \text{ Btu/mmBtu}) = 0.0018 \text{ lb/mmBtu}$$

Where:

E = particulate emission rate from natural gas, in lb/mmBtu;

1.9 lb/10⁶ scf = emission factor for filterable particulate matter from burning natural gas, from AP42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1073 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the particulate emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulates/mmBtu from AP42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iii) To determine the particulate emission rate for number 6 fuel oil, the permittee may use the emission factor of $[9.19 \times (S)] + 3.22$ lb particulates/10³ gallons from AP42, Section 1.3 Fuel Oil Combustion, Table 1.3-1, 9/98.

(iv) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.c Emission Limitation:

Particulate emissions shall not exceed 0.040 pound per million Btu of actual heat input when burning blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

Applicable Compliance Method:

(i) To determine the actual particulate emission rate for natural gas, the following equation may be used:

$$E \text{ (lb/mmBtu)} = (1.9 \text{ lb}/10^6 \text{ scf}) \times (1 \text{ scf}/1073 \text{ Btu}) \times (1,000,000 \text{ Btu/mmBtu}) = 0.0018 \text{ lb/mmBtu}$$

Where:

E = particulate emission rate from natural gas, in lb/mmBtu;

1.9 lb/10⁶ scf = emission factor for filterable particulate matter from burning natural gas, from AP42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1073 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the particulate emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulate/mmBtu from AP42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

V. Testing Requirements (continued)

(iii) The permittee may use a value of 0.015 lb particulate/mmBtu for the particulate emission rate for blast furnace gas. The value of 0.015 lb/mmBtu was obtained from emission testing on 10/21/91 of emissions unit B004 while burning only blast furnace gas.

(iv) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.d Emission Limitation:

Particulate emissions shall not exceed 0.13 lb/mmBtu of actual heat input when burning number 6 fuel oil or any mixture of number 6 fuel oil and other gaseous fuels.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation, while burning only number 6 fuel oil, in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

1.e Emission Limitation:

Sulfur dioxide emissions shall not exceed 1.6 lbs/mmBtu actual heat input.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission rate in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Boiler (B004)
Activity Description: 469 MMBtu/Hr B&W fired with N-G, BFG and COG

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
469 mmBtu/hr boiler fired with natural gas, blast furnace gas, and coke oven gas	OAC rule 3745-17-07(A)	The emission limitation established pursuant to this rule is less stringent than the emission limitation established pursuant to 40 CFR Part 60, Subpart D.
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input except when burning blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.
		The particulate emission limitation established pursuant to this rule for burning blast furnace gas is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3) and PSD permit #5-79-A-8.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-31-05(A)(3) PTI 02-486	Particulate emissions shall not exceed 0.030 pound per million Btu of actual heat input when burning blast furnace gas or any mixture of blast furnace gas and other gaseous fuels. The particulate emission limitation established pursuant to this rule for natural gas and coke oven gas is less stringent than the emission limitation established pursuant to OAC rule 3745-17-10(B)(1). The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-10(B)(1) (for gaseous fuels other than blast furnace gas) and 40 CFR Part 60, Subpart D. Sulfur dioxide emissions shall not exceed 0.2 pound per million Btu of actual heat input. NOx emissions shall not exceed 0.2 pound per million Btu of actual heat input.
	OAC rule 3745-18-84(J)	The emission limitation established pursuant to this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3) and PSD permit #5-79-A-8.
	40 CFR Part 60, Subpart D	Visible particulate emissions shall not exceed 20 percent opacity except for one 6-minute period per hour of not more than 27 percent opacity. The emission limitations established pursuant to this rule for particulates, sulfur dioxide, and NOx emissions are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

**Operations, Property,
and/or Equipment**

**Applicable Rules/
Requirements**

**Applicable Emissions
Limitations/Control
Measures**

40 CFR 52.21
PSD permit #5-79-A-8

The emission limitations established pursuant to this rule for sulfur dioxide and NOx emissions are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

The emission limitation established pursuant to this rule for particulate emissions is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. To ensure ongoing compliance with the sulfur dioxide emission limitation of 0.2 lb/mmBtu actual heat input, the permittee shall burn in this emissions unit only natural gas, blast furnace gas, and coke oven gas with a concentration of H₂S less than 35 grains per 100 dry standard cubic feet (as an average for each rolling, 3-hour period), unless the permittee demonstrates through calculations that during periods when coke oven gas containing greater than 35 grains per 100 dry standard cubic feet is burned, the sulfur dioxide emission rate is less than 0.2 lb/mmBtu actual heat input.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, blast furnace gas, and coke oven gas the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The permittee shall operate and maintain equipment to continuously monitor and record the nitrogen oxides emissions from this emissions unit in units of the applicable standard(s). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

Each continuous monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The permittee shall maintain on-site documentation from the USEPA or the Ohio EPA that the continuous nitrogen oxides monitoring system has been certified in accordance with 40 CFR Part 60. The letter of certification shall be made available to the Director upon request.

The permittee shall maintain records of the following data obtained by the continuous nitrogen oxides monitoring system: emissions of nitrogen oxides in lb/mmBtu actual heat input (as an average over each hour of operation), lbs/hr (as an average over each hour of operation), results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

The permittee shall maintain daily records of the total actual heat input values as determined through F-Factor and carbon dioxide/oxygen calculations as specified in 40 CFR Part 60, Appendix A, Method 19.

III. Monitoring and/or Record Keeping Requirements (continued)

3. Monitoring and record keeping for sulfur content is not required for blast furnace gas or natural gas because the sulfur dioxide emission rate from the burning of blast furnace gas or natural gas is less than the allowable sulfur dioxide emission rate in Section A.I.1 of these terms and conditions.
4. The permittee shall continuously monitor and record the sulfur content of the coke oven gas burned in this emissions unit to ensure that the concentration of sulfur compounds is less than 35 grains per 100 dry standard cubic feet (as an average for each rolling, 3-hour period). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the continuous sulfur dioxide and total reduced sulfur monitoring systems including, but not limited to, the grains of hydrogen sulfide per 100 dry standard cubic feet (dscf) for the coke oven gas on a daily average basis, based upon the average emission rate for the actual hours of operation for this emissions unit during each calendar day.

In lieu of the above requirement, the permittee may accept the coke oven gas supplier's monitoring and record keeping for sulfur content in the coke oven gas if said monitoring and record keeping meets the requirements of 40 CFR Part 60.13.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas, blast furnace gas, and/or coke oven gas was burned in this emission unit.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour period during which the concentration of H₂S in the coke oven gas burned in this emissions unit exceeded 35 grains per 100 dscf, and the actual H₂S content for each such 3-hour period. For each 3-hour period that exceeds 35 grains per 100 dscf, the permittee may provide calculations that demonstrate that during that 3-hour period the sulfur dioxide emission rate did not exceed 0.2 lb/mmBtu actual heat input. If the permittee makes this demonstration for any 3-hour period, the exceedance of the 35 grains per 100 dscf limitation shall not be considered a deviation of the operational restriction in Section A.II.1.
3. The permittee shall submit reports (hardcopy or electronic format) following the end of each calendar quarter to the Ohio EPA, Northeast District Office documenting the date, commencement and completion time, duration, magnitude, reason (if known), and corrective actions taken (if any), of all 3-hour average nitrogen oxides emission values in excess of the applicable nitrogen oxides emission limitation (lb/mmBtu).

The reports shall also document any continuous nitrogen oxides monitoring system downtime while the emissions unit was on line (date, time, duration and reason), along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the date, time, reason, and corrective action(s) taken for each time period of monitoring system malfunction. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report.

These quarterly excess emission reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity except for one 6-minute period per hour of not more than 27 percent opacity.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input except when burning blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

Applicable Compliance Method:

(i) To determine the actual particulate emission rate from burning natural gas, the following equation shall be used:

$$E \text{ (lb/mmBtu)} = (1.9 \text{ lb}/10^6 \text{ scf}) \times (1 \text{ scf}/1073 \text{ Btu}) \times (1,000,000 \text{ Btu}/\text{mmBtu}) = 0.0018 \text{ lb/mmBtu}$$

Where:

E = particulate emission rate from burning natural gas, in lb/mmBtu;

1.9 lb/10⁶ scf = emission factor for filterable particulate material from burning natural gas from AP42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1073 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the particulate emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulate/mmBtu from AP42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iii) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

V. Testing Requirements (continued)

1.c Emission Limitation:

Particulate emissions shall not exceed 0.030 pound per million Btu of actual heat input when burning blast furnace gas or any mixture of blast furnace gas and other gaseous fuels.

Applicable Compliance Method:

(i) To determine the actual particulate emission rate from burning natural gas, the following equation shall be used:

$$E \text{ (lb/mmBtu)} = (1.9 \text{ lb}/10^6 \text{ scf}) \times (1 \text{ scf}/1073 \text{ Btu}) \times (1,000,000 \text{ Btu}/\text{mmBtu}) = 0.0018 \text{ lb/mmBtu}$$

Where:

E = particulate emission rate from burning natural gas, in lb/mmBtu;

1.9 lb/10⁶ scf = emission factor for filterable particulate material from burning natural gas from AP42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1073 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the particulate emission rate for coke oven gas, the permittee may use the emission factor of 0.012 lb particulate/mmBtu from AP42, Section 12.5 Iron and Steel Production, Table 12.5-1, 10/86.

(iii) The permittee shall use a value of 0.015 lb particulate/mmBtu for the particulate emission rate for blast furnace gas. The value of 0.015 lb/mmBtu was obtained from emission testing on 10/21/91 of emissions unit B004 while burning only blast furnace gas.

(iv) If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(9).

V. Testing Requirements (continued)

1.d Emission Limitation:

Sulfur dioxide emissions shall not exceed 0.2 pound per million Btu of actual heat input.

Applicable Compliance Method:

(i) To determine the actual emission rate for SO₂ from natural gas, the following equation may be used:

$$E \text{ (lb/mmBtu)} = (0.6 \text{ lb}/10^6 \text{ scf}) \times (1 \text{ scf}/1073 \text{ Btu}) \times (1,000,000 \text{ Btu/mmBtu}) = 0.0006 \text{ lb/mmBtu}$$

Where:

E = SO₂ emission rate from natural gas, in lb/mmBtu;

0.6 lb/10⁶ scf = emission factor for SO₂ from burning natural gas from AP42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1073 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the actual emission rate for SO₂ from coke oven gas, the following equation may be used:

$$E \text{ (lb/mmBtu)} = (\text{H}_2\text{S content}) \times (1 \text{ lb}/7000 \text{ grains}) \times (1 \text{ scf}/580 \text{ Btu}) \times (64 \text{ SO}_2/34 \text{ H}_2\text{S}) \times (1,000,000 \text{ Btu/mmBtu})$$

Where:

E = SO₂ emission rate from coke oven gas, in lb/mmBtu;

H₂S content = grains of H₂S in 100 scf of coke oven gas recorded in Section A.III.4;

1 lb/7000 grains = conversion from pounds to grains;

1 scf/580 Btu = the heat value of 1 scf of coke oven gas;

64 SO₂/34 H₂S = the ratio of grams per mole of SO₂ to mole of H₂S; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(iii) Testing for SO₂ from blast furnace gas is not required because it does not contain measurable quantities of sulfur compounds according to "Steam", 39th Edition, The Babcock & Wilcox Company, 1978, p.5-20, and "Air Pollution Engineering Manual", Air & Waste Management Association, 1992, p. 650.

(iv) If required, the permittee shall demonstrate compliance with this emission rate while burning coke oven gas in accordance with 40 CFR Part 60, Appendix A, Methods 6 and 6C and the procedures in OAC rule 3745-18-04.

V. Testing Requirements (continued)

1.e Emission Limitation:

NOx emissions shall not exceed 0.2 pound per million Btu of actual heat input.

Applicable Compliance Method:

(i) The data from the continuous nitrogen oxides monitoring system may be used to demonstrate compliance with the lb/mmBtu emission limitation.

(ii) If required, the permittee shall demonstrate compliance with this emission rate in accordance with 40 CFR Part 60, Appendix A, Method 7E.

VI. Miscellaneous Requirements

1. Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F or equivalent requirements under OAC Chapter 3745-14. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Roadways and Parking Areas (F001)
Activity Description: Paved and unpaved roads and parking areas.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
"Appendix A" roadways and parking areas		
Paved roadways and parking areas (see Section A.1.2.a below)	OAC rule 3745-17-07(B)(4)	There shall be no visible particulate emissions from any paved roadway or parking area except for a period of time not to exceed six minutes during any sixty-minute observation period, as determined in accordance with paragraph (B)(4) of OAC rule 3745-17-03.
	OAC rule 3745-17-08(B), (B)(8), and (B)(9)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.1.2.c through A.1.2.i below.
Unpaved roadways and parking areas (see Section A.1.2.b below)	OAC rule 3745-17-07(B)(5)	There shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed thirteen minutes during any sixty-minute observation period, as determined in accordance with paragraph (B)(4) of OAC rule 3745-17-03.
	OAC rule 3745-17-08(B), (B)(8), and (B)(9)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.1.2.c through A.1.2.i below.

2. Additional Terms and Conditions

- 2.a** The "Appendix A" portions of the following paved roadways and parking areas are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08:

paved roadways:

data center driveway
main plant loop
transportation road
coated products access roads
galvanize/silicon shipping area
rolling and finishing access roads
56" mill access roads
machine shop/fabrication shop access roads
caster/SPA access roads
BOF/Heckett access roads
hot metal gate access road
blast furnace/boiler house access roads

paved parking areas:

data center parking area
store room and truck parking area

- 2.b** The "Appendix A" portions of the following unpaved roadways and parking areas are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08:

unpaved roadways:

coated products acid unloading area
pickler coil storage area
56" mill shipping coil storage area
main oil house/gasoline-diesel fueling area
slab storage east of 56" mill slab entrance
slab storage west of 56" mill slab entrance
caster exit and slab storage area
BOF access roadways
fabrication shop access roadways
access roadways to outside contractor trailers and #2 pumphouse
blast furnace office, maintenance, storage areas, waste water treatment, and boilerhouse access roadways
blast furnace sinter road, ore road, flue dust pile road, and car dumper road

unpaved parking areas:

rolling and finishing parking area

- 2.c** The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally effective control measures to ensure compliance.

2. Additional Terms and Conditions (continued)

- 2.d** The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with chemical stabilization at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally effective control measures to ensure compliance.
- 2.e** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- 2.f** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.
- 2.g** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- 2.h** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- 2.i** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

- 1.** Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments, unless the permittee relies on a designated roadway segment to determine the need for implementing the control measures for all the roadway segments, and each parking area in accordance with the following frequencies:

paved roadways and parking areas	minimum inspection frequency
All	Weekly
unpaved roadways and parking areas	minimum inspection frequency
All	Weekly*

*Because the permittee primarily employs chemical dust suppressants for the unpaved roadways, a minimum inspection frequency of weekly has been established rather than daily.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions on days when the plant is operating. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
3. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in 4.d. shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with Section A.1. of Part I of the General Terms and Conditions of this permit.

V. Testing Requirements

1. If required, compliance with the emission limitation for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraph (B)(3)(d) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Blst Fce Raw Mat'ls (Aggregate) Storage Piles (F002)

Activity Description: Various blast furnace raw material storage piles.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Blast furnace raw material storage piles, including iron ore, briquettes, blast furnace water treatment plant sludge, sinter, coke, dolomitic limestone, and blend	OAC rule 3745-17-07(B)(1)	Visible particulate emissions for any material handling operation shall not exceed twenty percent opacity as a three-minute average, as determined in accordance with paragraph (B)(3) of OAC rule 3745-17-03.
	OAC rule 3745-17-07(B)(6)	There shall be no visible particulate emissions from any material storage pile except for a period of time not to exceed thirteen minutes during any sixty-minute observation period, as determined in accordance with paragraph (B)(3) of OAC rule 3745-17-03.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.1.2.b through A.1.2.f below.

2. Additional Terms and Conditions

- 2.a The storage piles that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

Blast furnace raw material storage piles, including iron ore, briquettes, blast furnace water treatment plant sludge, sinter, coke, dolomitic limestone, and blend.

- 2.b The permittee shall employ reasonably available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. The permittee currently treats the load-in and load-out of materials at each storage pile with a water spray system applied at the stacker and uses a bucket reclaimer to the conveyor during load-out, if and as needed. Nothing in this paragraph shall prohibit the permittee from employing other equally effective control measures to ensure compliance.

2. Additional Terms and Conditions (continued)

- 2.c** The above-mentioned control measures shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspections conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during any such operation until further observation confirms that use of the measures are unnecessary.
- 2.d** The permittee shall employ reasonably available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. The permittee currently waters the sinter storage piles as necessary, arranges ore piles to provide a wind barrier, and maintains as low a storage pile height as possible to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally effective control measures to ensure compliance.
- 2.e** The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.
- 2.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile on a weekly basis, except the sinter storage piles shall be inspected on a daily basis.
2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile on a weekly basis, except the sinter storage piles shall be inspected on a daily basis.
3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile on a weekly basis, except the sinter storage piles shall be inspected on a daily basis.
4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

III. Monitoring and/or Record Keeping Requirements (continued)

7. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 7.d shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis after the end of each calendar quarter (i.e., by January 31, April 30, July 31, and October 31).

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
 - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. If required, compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.
2. If required, compliance with the visible emission limitation for the material handling operations identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BOF ESP Dust Handling (F005)

Activity Description: BOF precipitator dust handling.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
BOF electrostatic precipitator dust handling	OAC rule 3745-17-07(B)(1)	None. See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	None. See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. The BOF electrostatic precipitator dust handling operation is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The BOF electrostatic precipitator dust handling operation is not located within the areas identified in "Appendix A" of the rule.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Blst Fce Raw Mat'l Handling (F006)

Activity Description: Truck, rail car and clamshell unloading, conveying and transfer of blast furnace raw materials including: ore fines, briquettes, sinter, coke and dolomite

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Truck, rail car, and clamshell unloading, conveying, and transfer of blast furnace raw materials including: ore fines, briquettes, sinter, coke, and dolomite	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed twenty percent opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.1.2.b through A.2.d below.

2. Additional Terms and Conditions

- 2.a The material handling operations that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are the truck, rail car, and clamshell unloading, conveying, and transfer of blast furnace raw materials including: ore fines, briquettes, sinter, coke, and dolomite.

2. Additional Terms and Conditions (continued)

2.b The permittee shall employ reasonably available control measures for the above-identified material handling operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measures to ensure compliance:

material handling operations	control measures
raw material conveying .	maintain the partial enclosure around conveying operations
sinter loading/unloading	employ wet suppression
pellet and coke transfer . . .	maintain the total enclosure around belt conveyors for pellet and coke transfer operations
coke transfer . . .	maintain the total enclosure around belt conveyor loading and unloading for coke transfer operations

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures are unnecessary.

2.d Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operation	minimum inspection frequency
sinter loading/unloading	weekly

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall maintain records of the following information:
 - a. the date and reason any required inspection was not performed;
 - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - c. the dates the control measures were implemented; and
 - d. on a calendar quarter basis, the total number of days the control measures were implemented.

The information in A.III.3.d shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis after the end of each calendar quarter (i.e., by January 31, April 30, July 31, and October 31).

4. The permittee shall perform monthly checks, when the emissions unit is in operation, for any visible fugitive particulate emissions from the egress points (i.e., partial and total enclosures) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
 - a. each week during which an inspection was not performed by the required frequency; and
 - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.
3. The permittee shall submit semiannual written reports that (a) identify all months during which any visible fugitive particulate emissions were observed from the egress points (i.e., partial and total enclosures) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. If required, compliance with the visible emission limitation for the material handling operations identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BOF Raw Mat'l Handling (F007)

Activity Description: Truck unloading, conveying and transfer of alloys and fluxes used in steel making with fabric filter collector.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
BOF raw material handling	OAC rule 3745-17-07(B)(1)	None. See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	None. See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. The BOF raw material handling operation is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The BOF raw material handling operation is not located within the areas identified in "Appendix A" of the rule.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Hot Metal Transfer (F008)

Activity Description: Torpedo car unloading of hot metal into transfer ladles at BOF Shop pits.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Hot metal transfer from torpedo cars to ladles at BOF shop	OAC rule 3745-17-07(B)(1)	None. See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	None. See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. The hot metal transfer from torpedo cars to ladles at BOF shop is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The hot metal transfer from torpedo cars to ladles at BOF shop is not located within the areas identified in "Appendix A" of the rule.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler Ash Handling (F011)
Activity Description: No. 1 Boiler ash pneumatic conveying and two ash silos.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
No. 1 Boiler ash pneumatic conveying and two ash silos	OAC rule 3745-17-07(B)(1)	Visible particulate emissions shall not exceed twenty percent opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See A.1.2.b through A.1.2.d below.

2. Additional Terms and Conditions

- 2.a The material handling operations that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are fly ash and bottom ash handling operations including pneumatic conveying from the fly ash silo to trucks and bottom ash transfer to trucks for disposal.
- 2.b The permittee shall employ reasonably available control measures (RACM) for the above-identified material handling operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the RACM currently consist of:

material handling operations	control measures
pneumatic conveying from the fly ash silo to trucks	wet suppression at all times during conveying
bottom ash transfer to trucks	wet suppression at all times during transfer

Nothing in this paragraph shall prohibit the permittee from employing other, equally effective, control measures to ensure compliance.

- 2.c For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the inspections conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures are unnecessary.

2. Additional Terms and Conditions (continued)

- 2.d Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

material handling operations	minimum inspection frequency
pneumatic conveying from the fly ash silo to trucks	weekly
bottom ash transfer to trucks	weekly

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the Ohio EPA, Northeast District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
- the date and reason any required inspection was not performed;
 - the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
 - the dates the control measures were implemented; and
 - on a calendar quarter basis, the total number of days the control measures were implemented.

The information in A.III.4.d shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:
- each week during which an inspection was not performed by the required frequency; and
 - each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

V. Testing Requirements

1. If required, compliance with the visible emissions limitation of the material handling operations identified above shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

Facility Name: **WCI Steel, Inc.**
Facility ID: **02-78-00-0463**
Emissions Unit: **Boiler Ash Handling (F011)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Hot Metal Desulf. Station (F012)

Activity Description: Station in BOF Shop for desulfurizing agent injection into transfer ladles of hot metal vented to fabric filter.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Hot metal desulfurization station in BOF Shop for desulfurizing agent injection into transfer ladles of hot metal, equipped with a baghouse for particulate control	OAC rule 3745-31-05(A)(3) PTI 02-14116	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-18-06(E).
		Visible fugitive particulate emissions from the hot metal desulfurization station shall not exceed twenty percent opacity as a three-minute average from any building openings.
		Particulate emissions from the baghouse serving the hot metal desulfurization station shall not exceed 0.010 grain per dry standard cubic foot of exhaust gases, 0.0023 pound per ton of hot metal desulfurized, and 2.3 tons per year. See A.I.2.c below.
		Fugitive particulate emissions from the hot metal desulfurization station shall not exceed 32.2 tons per year. See A.I.2.d below.
		reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from this emissions unit (See A.I.2.e below.)
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the baghouse shall not exceed twenty percent opacity as a six-minute average.
	OAC rule 3745-18-06(E)	Sulfur dioxide emissions shall not exceed 905.3 lbs/hour.

2. Additional Terms and Conditions

- 2.a** Pursuant to OAC rule 3745-17-07(B)(11), OAC rules 3745-17-07(B)(1) through (9) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. The hot metal desulfurization station is not located within the areas identified in "Appendix A" of the rule.
- 2.b** Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The hot metal desulfurization station is not located within the areas identified in "Appendix A" of the rule.
- 2.c** The particulate emission limitation of 2.3 tons per year includes PM10 emissions of 1.7 tons per year.
- 2.d** The fugitive particulate emission limitation of 32.2 tons per year includes fugitive PM10 emissions of 6.1 tons per year.
- 2.e** The permittee shall employ reasonably available control measures that include the use of fans, and ductwork to adequately enclose, contain, and capture the particulate emissions, and vent the captured emissions to the baghouse. The collection efficiency of such equipment shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.
- 2.f** It is assumed that the potential to emit for sulfur dioxide is well below the allowable emission rate; therefore, it is not necessary to establish monitoring, record keeping, and reporting requirements to ensure ongoing compliance. The emission testing required for this emissions unit will confirm the accuracy of this assumption.

II. Operational Restrictions

- 1.** The pressure drop across the baghouse shall be maintained within the range of 2 to 8 inches of water while the emissions unit is in operation. The pressure drop shall not be considered outside the normal range when the pressure drop falls below the minimum point in the pressure differential range as a result of bag replacements.

The permittee may petition the Northeast District Office for reestablishment of the pressure drop range at any time provided the permittee can demonstrate to the Northeast District Office that the operating conditions upon which the pressure drop range was previously established are no longer applicable.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.
2. The permittee shall perform one daily check for any visible fugitive particulate emissions, when the weather conditions allow, from the egress points (i.e., building windows, doors, roof monitors, etc.) of the building housing this emissions unit. This daily check shall be performed at a time that is representative of the typical activity of the several operations housed within this building (regardless of whether this specific unit is in operation). The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
4. The permittee shall maintain records of the quantity of hot metal desulfurized in this emissions unit, in tons per year.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse was not within the allowable range specified above.

IV. Reporting Requirements (continued)

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitation in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:

Visible particulate emissions from the baghouse shall not exceed twenty percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- 1.b Emission Limitation:

Visible fugitive particulate emissions from the hot metal desulfurization station shall not exceed twenty percent opacity as a three-minute average from any building openings.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the modifications listed in paragraph (B)(3)(b) of OAC rule 3745-17-03.

- 1.c Emission Limitation:

Particulate emissions from the baghouse serving the hot metal desulfurization station shall not exceed 0.010 grain per dry standard cubic foot of exhaust gases and 0.0023 pound per ton of hot metal desulfurized.

Applicable Compliance Method:

If required, compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.d Emission Limitation:

Particulate emissions from the baghouse serving the hot metal desulfurization station shall not exceed 2.3 tons per year.

Applicable Compliance Method:

The following equation shall be used to demonstrate compliance with the annual particulate emission limitation:

$PE = 0.010 \text{ gr/dscf} \times 48,000 \text{ cf/min} \times 5 \text{ min/148 tons} \times 1 \text{ lb/7000 gr} \times 1 \text{ ton/2000 lbs} \times \text{amt. of hot metal desulfurized (in tons/yr)}$

Where

$E \text{ (TSP)} = \text{particulate emission rate (tons/yr)}$;

$0.01 \text{ gr/dscf} = \text{allowable particulate emission rate (grain/dry standard cubic feet)}$;

$48,000 \text{ acf/min} = \text{normal baghouse flow rate at a grain loading of } 0.010 \text{ gr/dscf (cubic feet/minute)}$;

$5 \text{ min/148 tons} = \text{maximum desulfurization cycle time of 5 minutes per 148 tons of metal}$;

$1 \text{ lb/7000 gr} = \text{one pound per 7000 grains}$;

$1 \text{ ton/2000 lbs} = \text{one ton per 2000 pounds}$; and

$\text{amt. of hot metal desulfurized (in tons/yr)} = \text{the total amount of hot metal desulfurized annually, as record in Section A.III.3.}$

1.e Emission Limitation:

Fugitive particulate emissions from the hot metal desulfurization process shall not exceed 32.2 tons per year.

Applicable Compliance Method:

The following equation shall be used to demonstrate compliance with the annual fugitive particulate emission limitation:

$FPE = \text{amt. of hot metal desulfurized (in tons/yr)} \times 1.09 \text{ lbs/ton} \times 0.03 \times 1 \text{ ton/2000 lbs}$;

Where

$FPE = \text{fugitive particulate emission rate (tons/yr)}$;

$\text{amt. of hot metal desulfurized (in tons/yr)} = \text{the total amount of hot metal desulfurized annually, as recorded in Section A.III.3}$;

$1.09 \text{ lbs/ton} = \text{emission factor for uncontrolled hot metal desulfurization specified in AP-42, Section 12.5, Table 12.5-1, 1/95 (Fifth Edition)}$;

$0.03 = \text{based upon 97\% control efficiency of the baghouse for the hot metal desulfurization process (3\% of particulate emissions from the hot metal desulfurization process are not captured by the baghouse)}$; and

$1 \text{ ton/2000 lbs} = \text{conversion of pounds to tons}$.

V. Testing Requirements (continued)

1.f Emission Limitation:

Sulfur dioxide emissions shall not exceed 905.3 lbs/hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission rate in accordance with 40 CFR Part 60, Appendix A, Methods 6 or 6C and the procedures in OAC rule 3745-18-04.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Continuous Slab Caster (F013)

Activity Description: Two strand continuous caster with argon shrouding, spray chamber steam ejection and nat'l gas fired cut-off torches. Tundish relining, drying and preheating.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Double strand continuous slab caster equipped with mechanical and argon shrouding of the steel stream from ladle to Tundish and mechanical shrouding of the steel stream from Tundish to mold	OAC rule 3745-31-05(A)(3) PTI 02-4470	Fugitive particulate emissions shall not exceed 1.82 pounds per hour from the double strand continuous slab caster.
	OAC rule 3745-17-07(B)(1)	None. See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	None. See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11), OAC rule 3745-17-07(B)(1) through (9) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. The double strand continuous slab caster is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The double strand continuous slab caster is not located within the areas identified in "Appendix A" of the rule.

II. Operational Restrictions

1. The permittee shall utilize the mechanical shrouding from the Tundish to the mold when this emissions unit is in operation.
2. The permittee shall utilize the mechanical and argon shrouding from the ladle to the Tundish when this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly inspections of the mechanical shrouding from the Tundish to the mold and the mechanical and argon shrouding from the ladle to the Tundish to ensure there are no cracks, gaps, and/or other operational problems with the shrouds that would impair their ability to contain the fugitive dust.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall maintain records of the following information:
 - a. the date of each inspection where it was determined by the permittee that there were operational problems with the mechanical shroud(s) and/or argon shroud;
 - b. a description of the operational problems with the mechanical shroud(s) and/or argon shroud;
 - c. the date(s) that the operational problems with the mechanical shroud(s) and/or argon shroud were corrected; and
 - d. a description of the repairs to the mechanical shroud(s) and/or argon shroud which corrected the operational problems.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the double strand continuous slab caster was operated without the mechanical shroud(s) and/or argon shrouding.

V. Testing Requirements

1. Emission Limitation:

Fugitive particulate emissions shall not exceed 1.82 pounds per hour from the double strand continuous slab caster.

Applicable Compliance Method:

The following equation shall be used to demonstrate compliance with the fugitive particulate emission limitation:

$$E = EF \times PR \times 0.10$$

where

E = fugitive particulate emission rate (lbs/hr);

EF = emission factor of 0.07 lb of particulates/ton of product, from AP 42, Section 12.5 Iron and Steel Production, Table 12.5-1, dated 1/95, uncontrolled teeming of unleaded steel;

PR = production rate of 260 tons/hr, based upon the maximum production capacity of the double strand continuous slab caster; and

0.10 = The mechanical shrouding is assumed to provide 90% capture of fugitive emissions. Control efficiency is based on Ohio EPA's RACM document, Section 2.2.3 Steel Manufacture, Table 2.2.3-2, item 8 for control efficiency of fugitive particulate emissions from continuous casting with hooding.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Steel Slab Ripping Torch #1 (F014)
Activity Description: Natural gas fired automatic torch with high pressure nozzle.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Steel slab ripping torch #1 using natural gas	OAC rule 3745-31-05(A)(3) PTI 02-7043	Fugitive particulate emissions shall not exceed 0.5 pound per hour from steel slab ripping torch #1. If needed to minimize or eliminate visible fugitive particulate emissions resulting from slag splatter during operation of steel slab ripping torch #1 and to comply with the visible emissions limitation of this permit, a water table particulate emission suppression system or other appropriate control system shall be used.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions from steel slab ripping torch #1 shall not exceed twenty percent opacity as a three-minute average from any building openings. See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. Steel slab ripping torch #1 is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. Steel slab ripping torch #1 is not located within the areas identified in "Appendix A" of the rule.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly inspections of the operation of steel slab ripping torch #1 to determine whether the use of a water table particulate emission suppression system or other appropriate control system is necessary.
2. If use of a water table particulate emission suppression system or other appropriate control system is necessary, the permittee shall perform weekly inspections of whichever system is used in association with steel slab ripping torch #1 to ensure there are no operational problems with the system which would impair its ability to control the visible emissions of fugitive dust.
3. If use of the water table emission suppression system or other appropriate control system is necessary, the permittee shall maintain records of the following information:
 - a. the date of each inspection where it was determined by the permittee that there were operational problems with the water table particulate emission suppression system or other appropriate control system;
 - b. a description of the operational problems with the water table particulate emission suppression system or other appropriate control system;
 - c. the date(s) that the operational problems with the water table particulate emission suppression system or other appropriate control system were corrected; and
 - d. a description of the repairs to the water table particulate emission suppression system or other appropriate control system which corrected the operational problems.
4. The permittee shall perform weekly checks, when at least one or more of emissions units F014, F015, F021, and/or F022 is (are) in operation, for any visible fugitive particulate emissions from the egress points (i.e., building openings) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
 - a. each week during which an inspection was not performed by the required frequency; and
 - b. each instance and the duration of each instance when use of the water table particulate emission suppression system or other appropriate control system was necessary but not implemented.
2. The permittee shall submit semiannual written reports that (a) identify all weeks during which any visible fugitive particulate emissions were observed from the egress points (i.e., building openings) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation:

Fugitive particulate emissions shall not exceed 0.5 pound per hour from steel slab ripping torch #1.

Applicable Compliance Method:

The following equation shall be used to demonstrate compliance with the fugitive particulate emission limitation:

$$E = EF \times PR \times 12 \text{ months/yr} \times 1 \text{ yr}/8760 \text{ hrs}$$

where

E = fugitive particulate emission rate (lbs/hr);

EF = emission factor of 0.0126 lb of particulate/ton derived from an emission factor of 0.1 lb/ton from AP 42, Section 12.5 Iron and Steel Production, Table 12.5-1, dated 1/95, uncontrolled machine scarfing, and taking into account the surface areas of typical slabs for scarfing (13.01 ft²/ton scarfed) and slitting (1.64 ft²/ton slit) [(1.64 ft²/13.01 ft²) x 0.1 lbs = 0.0126 lb/ton];

PR = production rate of 25,000 tons per month, based upon the maximum weight of slabs processed per month by steel slab ripping torch #1 (tons/month);

12 = 12 months operation per year; and

1/8760 = one year per 8760 hours.

2. If required, compliance with the visible emission limitation for steel slab ripping torch #1 identified in Section A.I.1 shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modification listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Steel Slab Ripping Torch #2 (F015)
Activity Description: Natural gas fired automatic torch with high pressure nozzle.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Steel slab ripping torch #2 using natural gas	OAC rule 3745-31-05(A)(3) PTI 02-7043	Fugitive particulate emissions shall not exceed 0.5 pound per hour from steel slab ripping torch #2. If needed to minimize or eliminate visible fugitive particulate emissions resulting from slag splatter during operation of steel slab ripping torch #2 and to comply with the visible emissions limitation of this permit, a water table particulate emission suppression system or other appropriate control system shall be used. Visible particulate emissions from steel slab ripping torch #2 shall not exceed twenty percent opacity as a three-minute average from any building openings.
	OAC rule 3745-17-07(B)(1)	See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. Steel slab ripping torch #2 is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. Steel slab ripping torch #2 is not located within the areas identified in "Appendix A" of the rule.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly inspections of the operation of steel slab ripping torch #2 to determine whether the use of a water table particulate emission suppression system or other appropriate control system is necessary.
2. If use of a water table particulate emission suppression system or other appropriate control system is necessary, the permittee shall perform weekly inspections of whichever system is used in association with steel slab ripping torch #2 to ensure there are no operational problems with the system which would impair its ability to control the visible emissions of fugitive dust.
3. If use of the water table emission suppression system or other appropriate control system is necessary, the permittee shall maintain records of the following information:
 - a. the date of each inspection where it was determined by the permittee that there were operational problems with the water table particulate emission suppression system or other appropriate control system;
 - b. a description of the operational problems with the water table particulate emission suppression system or other appropriate control system;
 - c. the date(s) that the operational problems with the water table particulate emission suppression system or other appropriate control system were corrected; and
 - d. a description of the repairs to the water table particulate emission suppression system or other appropriate control system which corrected the operational problems.
4. The permittee shall perform weekly checks, when at least one or more of emissions units F014, F015, F021, and/or F022 is (are) in operation, for any visible fugitive particulate emissions from the egress points (i.e., building openings) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
 - a. each week during which an inspection was not performed by the required frequency; and
 - b. each instance and the duration of each instance when use of the water table particulate emission suppression system or other appropriate control system was necessary but not implemented.
2. The permittee shall submit semiannual written reports that (a) identify all weeks during which any visible fugitive particulate emissions were observed from the egress points (i.e., building openings) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation:

Fugitive particulate emissions shall not exceed 0.5 pound per hour from steel slab ripping torch #2.

Applicable Compliance Method:

The following equation shall be used to demonstrate compliance with the fugitive particulate emission limitation:

$$E = EF \times PR \times 12 \text{ months/yr} \times 1 \text{ yr}/8760 \text{ hrs}$$

where

E = fugitive particulate emission rate (lbs/hr);

EF = emission factor of 0.0126 lb of particulate/ton derived from an emission factor of 0.1 lb/ton from AP 42, Section 12.5 Iron and Steel Production, Table 12.5-1, dated 1/95, uncontrolled machine scarfing, and taking into account the surface areas of typical slabs for scarfing (13.01 ft²/ton scarfed) and slitting (1.64 ft²/ton slit) [(1.64 ft²/13.01 ft²) x 0.1 lbs = 0.0126 lb/ton];

PR = production rate of 25,000 tons per month, based upon the maximum weight of slabs processed per month by steel slab ripping torch #2 (tons/month);

12 = 12 months operation per year; and

1/8760 = one year per 8760 hours.

2. If required, compliance with the visible emission limitation for steel slab ripping torch #2 identified in Section A.I.1 shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modification listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Old Landfill Material Handling (F020)
Activity Description: Old residual waste landfill and material handling

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Old residual solid waste landfill material handling	OAC rule 3745-17-07(B)(1)	None. See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	None. See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. The old residual solid waste landfill material handling operations are not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The old residual solid waste landfill material handling operations are not located within the areas identified in "Appendix A" of the rule.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Steel Slab Ripping Machine #5 (F021)
Activity Description: Natural gas fired automatic torch with high pressure nozzle.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Steel slab ripping torch #5 using natural gas	OAC rule 3745-31-05(A)(3) PTI 02-3116	Fugitive particulate emissions shall not exceed 4.18 tons per year from steel slab ripping torch #5. If needed to minimize or eliminate visible fugitive particulate emissions resulting from slag splatter during operation of steel slab ripping torch #5 and to comply with the visible emissions limitation of this permit, a water table particulate emission suppression system or other appropriate control system shall be used. Visible particulate emissions from steel slab ripping torch #5 shall not exceed ten percent opacity as a six-minute average from any building openings.
	OAC rule 3745-17-07(B)(1) OAC rule 3745-17-08(B)(3)	See A.I.2.a below. See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. Steel slab ripping torch #5 is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. Steel slab ripping torch #5 is not located within the areas identified in "Appendix A" of the rule.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly inspections of the operation of steel slab ripping torch #5 to determine whether the use of a water table particulate emission suppression system or other appropriate control system is necessary.
2. If use of a water table particulate emission suppression system or other appropriate control system is necessary, the permittee shall perform weekly inspections of whichever system is used in association with steel slab ripping torch #5 to ensure there are no operational problems with the system which would impair its ability to control the visible emissions of fugitive dust.
3. If use of the water table emission suppression system or other appropriate control system is necessary, the permittee shall maintain records of the following information:
 - a. the date of each inspection where it was determined by the permittee that there were operational problems with the water table particulate emission suppression system or other appropriate control system;
 - b. a description of the operational problems with the water table particulate emission suppression system or other appropriate control system;
 - c. the date(s) that the operational problems with the water table particulate emission suppression system or other appropriate control system were corrected; and
 - d. a description of the repairs to the water table particulate emission suppression system or other appropriate control system which corrected the operational problems.
4. The permittee shall perform weekly checks, when at least one or more of emissions units F014, F015, F021, and/or F022 is (are) in operation, for any visible fugitive particulate emissions from the egress points (i.e., building openings) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
 - a. each week during which an inspection was not performed by the required frequency; and
 - b. each instance and the duration of each instance when use of the water table particulate emission suppression system or other appropriate control system was necessary but not implemented.
2. The permittee shall submit semiannual written reports that (a) identify all weeks during which any visible fugitive particulate emissions were observed from the egress points (i.e., building openings) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation:

Fugitive particulate emissions shall not exceed 4.18 tons per year from steel slab ripping torch #5.

Applicable Compliance Method:

The following equation shall be used to demonstrate compliance with the fugitive particulate emission limitation:

$$E = EF \times PR \times 12 \times 1/2000$$

where

E = fugitive particulate emission rate (tons/yr);

EF = emission factor of 0.0139 lb of particulate/ton derived from an emission factor of 0.1 lb/ton from AP 42, Section 12.5 Iron and Steel Production, Table 12.5-1, dated 1/95, uncontrolled machine scarfing, and taking into account the surface areas of typical slabs for scarfing (13.01 ft²/ton scarfed) and slitting (1.64 ft²/ton slit) [(1.64 ft²/13.01 ft²) x 0.1 lbs = 0.0126 lb/ton], and side trimming [(2.5 ft/25 ft slab) x 0.0126 lb/ton = 0.00126 lb/ton] to get the emission factor (0.0126 lb/ton + 0.00126 lb/ton = 0.0139 lb/ton) ;

PR = production rate of 50,000 tons per month, based upon the maximum weight of slabs processed per month by steel slab ripping torch #5 (tons/month);

12 = 12 months operation per year; and

1/2000 = one ton per 2000 pounds.

2. If required, compliance with the visible emission limitation for steel slab ripping torch #5 identified in Section A.I.1 shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modification listed in paragraph (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Steel Slab Ripping Machine #6 (F022)
Activity Description: Natural gas fired automatic torch with high pressure nozzle.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Steel slab ripping torch #6 using natural gas	OAC rule 3745-31-05(A)(3) PTI 02-3116	Fugitive particulate emissions shall not exceed 4.18 tons per year from steel slab ripping torch #6. If needed to minimize or eliminate visible fugitive particulate emissions resulting from slag splatter during operation of steel slab ripping torch #6 and to comply with the visible emissions limitation of this permit, a water table particulate emission suppression system or other appropriate control system shall be used.
	OAC rule 3745-17-07(B)(1) OAC rule 3745-17-08(B)(3)	Visible particulate emissions from steel slab ripping torch #6 shall not exceed ten percent opacity as a six-minute average from any building openings. See A.I.2.a below. See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. Steel slab ripping torch #6 is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. Steel slab ripping torch #6 is not located within the areas identified in "Appendix A" of the rule.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly inspections of the operation of steel slab ripping torch #6 to determine whether the use of a water table particulate emission suppression system or other appropriate control system is necessary.
2. If use of a water table particulate emission suppression system or other appropriate control system is necessary, the permittee shall perform weekly inspections of whichever system is used in association with steel slab ripping torch #6 to ensure there are no operational problems with the system which would impair its ability to control the visible emissions of fugitive dust.
3. If use of the water table emission suppression system or other appropriate control system is necessary, the permittee shall maintain records of the following information:
 - a. the date of each inspection where it was determined by the permittee that there were operational problems with the water table particulate emission suppression system or other appropriate control system;
 - b. a description of the operational problems with the water table particulate emission suppression system or other appropriate control system;
 - c. the date(s) that the operational problems with the water table particulate emission suppression system or other appropriate control system were corrected; and
 - d. a description of the repairs to the water table particulate emission suppression system or other appropriate control system which corrected the operational problems.
4. The permittee shall perform weekly checks, when at least one or more of emissions units F014, F015, F021, and/or F022 is (are) in operation, for any visible fugitive particulate emissions from the egress points (i.e., building openings) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. the total duration of any visible emission incident; and
 - c. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify any of the following occurrences:
 - a. each week during which an inspection was not performed by the required frequency; and
 - b. each instance and the duration of each instance when use of the water table particulate emission suppression system or other appropriate control system was necessary but not implemented.
2. The permittee shall submit semiannual written reports that (a) identify all weeks during which any visible fugitive particulate emissions were observed from the egress points (i.e., building openings) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Emission Limitation:

Fugitive particulate emissions shall not exceed 4.18 tons per year from steel slab ripping torch #6.

Applicable Compliance Method:

The following equation shall be used to demonstrate compliance with the fugitive particulate emission limitation:

$$E = EF \times PR \times 12 \times 1/2000$$

where

E = fugitive particulate emission rate (tons/yr);

EF = emission factor of 0.0139 lb of particulate/ton derived from an emission factor of 0.1 lb/ton from AP 42, Section 12.5 Iron and Steel Production, Table 12.5-1, dated 1/95, uncontrolled machine scarfing, and taking into account the surface areas of typical slabs for scarfing (13.01 ft²/ton scarfed) and slitting (1.64 ft²/ton slit) [(1.64 ft²/13.01 ft²) x 0.1 lbs = 0.0126 lb/ton], and side trimming [(2.5 ft/25 ft slab) x 0.0126 lb/ton = 0.00126 lb/ton] to get the emission factor (0.0126 lb/ton + 0.00126 lb/ton = 0.0139 lb/ton) ;

PR = production rate of 50,000 tons per month, based upon the maximum weight of slabs processed per month by steel slab ripping torch #6 (tons/month);

12 = 12 months operation per year; and

1/2000 = one ton per 2000 pounds.

2. If required, compliance with the visible emission limitation for steel slab ripping torch #6 identified in Section A.I.1 shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modification listed in paragraph (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Gasoline Dispensing (G001)

Activity Description: Facility fuel dispensing facilities with 3 gas ASTs, 2 diesel ASTs and 1 kerosene AST; and dispensing pumps and nozzels.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Gasoline storage tank: one 4,000-gallon aboveground storage tank	OAC rule 3745-21-09(R)	None. See A.2.a below.
Gasoline storage tanks: two 150-gallon aboveground storage tanks		
Diesel storage tanks: one 12,000-gallon aboveground storage tank and one 10,000-gallon aboveground storage tank		
Kerosene storage tank: one 8,000-gallon aboveground storage tank		

2. Additional Terms and Conditions

- 2.a Any gasoline dispensing facility which has an annual throughput of less than one hundred twenty thousand (120,000) gallons of gasoline is not subject to the requirements of paragraphs (R)(1) to (R)(3) of OAC rule 3745-21-09(R).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the quantity of gasoline delivered to the facility during each calendar month. The records shall be maintained at the facility for a period of three years.

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA, Northeast District Office, if the annual gasoline throughput for any rolling twelve-month period is equal to or greater than one hundred twenty thousand (120,000) gallons. The Ohio EPA, Northeast District Office, shall be notified within forty-five (45) days after the exceedance occurs.

Facility Name: **WCI Steel, Inc.**
Facility ID: **02-78-00-0463**
Emissions Unit: **Gasoline Dispensing (G001)**

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Silicon Steel Coating Line (K001)

Activity Description: Continuous silicon steel core plating line; including roll coater, curing oven (catenary furnace) with two exhaust afterburners available.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Continuous silicon steel core plating line including roll coater and curing oven (catenary furnace), equipped with two exhaust afterburners	OAC rule 3745-31-05(A)(3) PTI 02-190	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-09(E).
	OAC rule 3745-21-09(E)	No owner or operator of a coil coating line may cause, allow, or permit the discharge into the ambient air of any volatile organic compounds (VOCs) in excess of 2.6 pounds of VOC per gallon of coating, excluding water and exempt solvents, or, if a control system is employed, 4.0 pounds of VOC per gallon of solids from a prime coat, topcoat, or single coat coating line.

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The temperature of the final exhaust gases from the catenary furnace shall not drop below 1240 degrees Fahrenheit, as an average for each 3-hour period, when the emissions unit is in operation employing a coating with a VOC content in excess of 2.6 lbs/gallon, excluding water and exempt solvents.
- If necessary, the permittee shall operate the afterburners for the catenary furnace to ensure that the temperature of the exhaust gases from the catenary furnace do not drop below 1240 degrees Fahrenheit, as an average, for any three-hour period when the emissions unit is in operation employing a coating with a VOC content in excess of 2.6 lbs/gallon, excluding water and exempt solvents.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day for all 3-hour periods when the coating line was in operation and the temperature of the exhaust gases from the catenary furnace was greater than 1240 degrees Fahrenheit:
 - a. the name and identification number of each coating used;
 - b. the mass of VOC per unit volume of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating;
 - c. the maximum VOC content (mass of VOC per unit volume of coating solids, as applied) or the daily volume-weighted average VOC content (mass of VOC per unit volume of coating solids, as applied) of all the coatings; and
 - d. the calculated, controlled VOC emissions rate, in mass of VOC per unit volume of coating solids, as applied [the controlled VOC emission rate shall be calculated using (i) either the maximum VOC content or the daily volume-weighted VOC content and (ii) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the source was in compliance].
2. The permittee shall collect and record the following information each day for all 3-hour periods when the coating line was in operation and the temperature of the exhaust gases from the catenary furnace was less than 1240 degrees Fahrenheit:
 - a. the name and identification number of each coating used; and
 - b. the VOC content, in pounds of VOC per gallon of coating, as applied, excluding water and exempt solvents.
3. The permittee shall continuously monitor and record the temperature of the exhaust gases from the catenary furnace when the coating line is in operation. The permittee shall maintain a record of the temperature of the exhaust gases from the catenary furnace for each 3-hour period of operation of the coating line.
4. The permittee shall maintain a log or record of the operating time for the capture (collection) system, control device, monitoring equipment, and the associated coating line when it is in operation.

IV. Reporting Requirements

1. The permittee shall notify the Ohio EPA Northeast District Office of any daily record showing that the calculated, controlled VOC emission rate exceeded 4.0 pounds of VOC per gallon of solids during periods when the average temperature of the exhaust gases from the catenary furnace was greater than 1240 degrees Fahrenheit. A copy of such record shall be sent to the Ohio EPA Northeast District Office within 45 days after the exceedance occurs.
2. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the average temperature of the exhaust gases from the catenary furnace, when the emissions unit was in operation, was less than 1240 degrees Fahrenheit and the VOC contents of any of the coatings employed exceeded 2.6 pounds VOC per gallon of coating, excluding water and exempt solvents. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit quarterly summaries that include a log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation. These summaries shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. The reports shall also indicate the date(s) and time(s) that the afterburners on the catenary furnace were employed.

V. Testing Requirements

1. Compliance with the emission limitation in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

No owner or operator of a coil coating line may cause, allow, or permit the discharge into the ambient air of any volatile organic compounds (VOCs) in excess of 2.6 pounds of VOC per gallon of coating, excluding water and exempt solvents, or, if a control system is employed, 4.0 pounds of VOC per gallon of solids from a prime coat, topcoat, or single coat coating line.

Applicable Compliance Method:

- i. Compliance shall be demonstrated based upon the record keeping requirements specified in Section A.III of these terms and conditions.
 - ii. US EPA Method 24 shall be used to determine the VOC contents of all the coatings employed in this emissions unit.
 - iii. If a control system is required to demonstrate compliance with the 4.0 pounds of VOC per gallon of solids VOC discharge limit, compliance shall be demonstrated through emission testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, 25A, and 204.
2. The permittee shall conduct emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after the permittee begins using coatings that require a control system to demonstrate compliance with the 4.0 pounds of VOC per gallon of solids VOC discharge limit.
 - b. The following test methods shall be employed to determine the capture and control efficiency of the catenary furnace: 40 CFR Part 60, Appendix A, Methods 1 through 4, and 25 or 25A, as appropriate and 40 CFR Part 51, Appendix M, Method 204.
 - c. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - d. The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) or the outlet concentration shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

V. Testing Requirements (continued)

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mechanical Shop Parts Washers (L025)
Activity Description: Cold solvent parts washer.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Solvent metal cold cleaner No. 650-77870 using Safety-Kleen 105 parts washing solvent or a comparable solvent	OAC rule 3745-21-09(O)(2)	See A.II.1 below.
	OAC rule 3745-31-05(A)(3) PTI 02-8062	Emissions of volatile organic compounds (VOC) shall not exceed 1.21 pounds per hour and 5.27 tons per year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(O).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall equip the cold cleaner with either:
 - a. a cover; and if the solvent has a vapor pressure greater than 0.3 pound per square inch absolute measured at one hundred degrees Fahrenheit, or the solvent is heated or agitated, the cover shall be designed and constructed so that it can be easily operated with one hand; or
 - b. a remote solvent reservoir from which solvent is pumped through a nozzle suspended over a sink-like work area which drains back to the reservoir, provided the sink-like work area has an open drain area of less than sixteen square inches and provided the solvent neither is heated above one hundred degrees Fahrenheit nor has a vapor pressure greater than 0.6 pound per square inch absolute, measured at one hundred degrees Fahrenheit.
2. The permittee shall equip the cold cleaner with a device for draining the cleaned parts; and if the solvent has a vapor pressure greater than 0.6 pound per square inch absolute, measured at one hundred degrees Fahrenheit, the drainage facility shall be constructed internally so that parts are enclosed under the cover during draining unless an internal type drainage device cannot fit into the cleaning system.

II. Operational Restrictions (continued)

3. The permittee shall install one of the following devices if the solvent vapor pressure is greater than 0.6 pound per square inch absolute measured at one hundred degrees Fahrenheit, or if the solvent is heated above one hundred twenty degrees Fahrenheit:
 - a. freeboard that gives a freeboard ratio greater than or equal to 0.7;
 - b. water cover (solvent must be insoluble in and heavier than water); or
 - c. other systems of equivalent control, such as refrigerated chiller or carbon adsorption, approved by the Ohio EPA Northeast District Office.
4. The permittee shall operate and maintain the cold cleaner in accordance with the following practices to minimize solvent evaporation from the unit:
 - a. provide a permanent, legible, conspicuous label, summarizing the operating requirements;
 - b. store waste solvent in covered containers;
 - c. close the cover whenever parts are not being handled in the cleaner;
 - d. drain the cleaned parts until dripping ceases;
 - e. if used, supply a solvent spray that is a solid fluid stream (not a fine, atomized, or shower-type spray) at a pressure that does not exceed ten pounds per square inch gauge; and
 - f. clean only materials that are neither porous nor absorbent.
5. The permittee shall not employ any of the halogenated solvents identified in 40 CFR Part 63, Subpart T, in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. Any owner or operator of a solvent metal cleaning operation shall maintain records of the following information in a readily accessible location for at least five years and shall make these records available to the Director upon verbal or written request:
 - a. all control equipment maintenance such as replacement of the carbon in a carbon adsorption unit;
 - b. for cold cleaners, the types of solvents employed and the vapor pressure of each solvent (pounds per square inch absolute) measured at one hundred degrees Fahrenheit; and
 - c. the results of all emissions tests conducted, if required, to demonstrate compliance with the terms and conditions of this permit.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall collect and record the following information for each month for this emissions unit:
 - a. the company identification of each solvent employed;
 - b. an indication of whether or not each solvent employed is a hazardous air pollutant;
 - c. the density of each solvent employed (in pounds per gallon);
 - d. the liquid volume of cleaning solvent employed (in gallons);
 - e. liquid volume of cleaning solvent sent off-site as waste (in gallons);
 - f. the number of hours of operation;
 - g. the total VOC emissions {the summation of [(d - e) x c] for all solvents employed}, in pounds;
 - h. the average hourly VOC emissions (g/f), in pounds/hour; and
 - i. the total annual VOC emissions (the summation of (h) on an annual basis).

IV. Reporting Requirements

1. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a solvent that is a hazardous air pollutant was employed in this emissions unit.
3. The permittee shall notify the Ohio EPA Northeast District Office of any monthly record showing that the calculated VOC emission rate exceeded 1.21 pounds of VOC per hour. A copy of such record shall be sent to the Ohio EPA Northeast District Office with the next quarterly deviation report due.

V. Testing Requirements

1. Compliance with the emissions limitations of 1.21 lbs/hour and 5.27 tons/year in Section A.I of these terms and conditions shall be determined in accordance with record keeping in Section A.III.2 of these terms and conditions

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 56" Mill Reheat Furnace #1 (P001)

Activity Description: Rust Engineering 750 MMBtu/Hr furnace fired with mixed gas or coke oven gas.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
750 mmBtu/hr, 56" mill reheat furnace, direct fired with natural gas, coke oven gas, or a mixture of natural gas and coke oven gas	OAC rule 3745-17-11	None. See A.I.2.a below.
	OAC rule 3745-17-07(A)	None. See A.I.2.b below.
	OAC rule 3745-18-84(I)	Sulfur dioxide emissions shall not exceed 1.7 lbs/mmBtu actual heat input.

2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate matter emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

II. Operational Restrictions

1. To ensure ongoing compliance with the sulfur dioxide emission limitation of 1.7 lbs/mmBtu actual heat input, the permittee shall burn in this emissions unit only natural gas, coke oven gas with a concentration of H₂S less than 100 grains per 100 dry standard cubic feet (as an average for each rolling, 3-hour period), or a mixture of natural gas and coke oven gas with a concentration of H₂S less than 100 grains per 100 dry standard cubic feet (as an average for each rolling, 3-hour period), unless the permittee demonstrates through calculations that during periods when coke oven gas containing greater than 100 grains per 100 dry standard cubic feet is burned, the sulfur dioxide emission rate is less than 1.7 lbs/mmBtu actual heat input.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, coke oven gas, or a mixture of natural gas and coke oven gas the permittee shall maintain a record of the type, quantity, and quality of fuel burned in this emissions unit.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall continuously monitor and record the sulfur content of the coke oven gas burned in this emissions unit to ensure that the concentration of sulfur compounds is less than 100 grains per 100 dry standard cubic feet (as an average for each rolling, 3-hour period). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the continuous sulfur dioxide and total reduced sulfur monitoring systems including, but not limited to, the grains of hydrogen sulfide per 100 dry standard cubic feet (dscf) for the coke oven gas on a daily average basis, based upon the average emission rate for the actual hours of operation for this emissions unit during each calendar day.

In lieu of the above requirement, the permittee may accept the coke oven gas supplier's monitoring and record keeping for sulfur content in the coke oven gas if said monitoring and record keeping meets the requirements of 40 CFR Part 60.13.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas and/or coke oven gas was burned in this emission unit.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour period during which the concentration of H₂S in the coke oven gas burned in this emissions unit exceeded 100 grains per 100 dscf, and the actual H₂S content for each such 3-hour period. For each 3-hour period that exceeds 100 grains per 100 dscf, the permittee may provide calculations that demonstrate that during that 3-hour period the sulfur dioxide emission rate did not exceed 1.7 lbs/mmBtu actual heat input. If the permittee makes this demonstration for any 3-hour period, the exceedance of the 100 grains per 100 dscf limitation shall not be considered a deviation of the operational restriction in Section A.II.1.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

Sulfur dioxide emissions shall not exceed 1.7 lbs/mmBtu actual heat input.

Applicable Compliance Method:

(i) To determine the actual emission rate for SO₂ from natural gas, the following equation may be used:

$$E \text{ (lb/mmBtu)} = (0.6 \text{ lb}/10^6 \text{ scf}) \times (1 \text{ scf}/1073 \text{ Btu}) \times (1,000,000 \text{ Btu/mmBtu}) = 0.0006 \text{ lb/mmBtu}$$

Where:

E = SO₂ emission rate from natural gas, in lb/mmBtu;

0.6 lb/10⁶ scf = emission factor for SO₂ from burning natural gas from AP42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1073 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the actual emission rate for SO₂ from coke oven gas, the following equation may be used:

$$E \text{ (lb/mmBtu)} = (\text{H}_2\text{S content}) \times (1 \text{ lb}/7000 \text{ grains}) \times (1 \text{ scf}/580 \text{ Btu}) \times (64 \text{ SO}_2/34 \text{ H}_2\text{S}) \times (1,000,000 \text{ Btu/mmBtu})$$

Where:

E = SO₂ emission rate from coke oven gas, in lb/mmBtu;

H₂S content = grains of H₂S in 100 scf of coke oven gas recorded in Section A.III.2;

1 lb/7000 grains = conversion from pounds to grains;

1 scf/580 Btu = the heat value of 1 scf of coke oven gas;

64 SO₂/34 H₂S = the ratio of grams per mole of SO₂ to mole of H₂S; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(iii) If required, the permittee shall demonstrate compliance with this emission rate in accordance with 40 CFR Part 60, Appendix A, Methods 6 or 6C and the procedures in OAC rule 3745-18-04.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 5 Continuous Pickler (P002)

Activity Description: Wean Engineering continuous pickling line using HCl with coil welder.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Number 5 continuous steel pickling line using HCl, equipped with a wet scrubber	OAC rule 3745-17-11(B)(1)	Particulate emissions from the wet scrubber outlet from steel pickling line number 5 shall not exceed 50.2 pounds per hour. See A.I.2.e below.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the wet scrubber outlet shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
	40 CFR Part 63, Subpart CCC	HCl emissions from the wet scrubber outlet from steel pickling line number 5 shall not exceed 18 parts per million by volume (ppmv). See A.I.2.a through A.I.2.d, A.II.2, and A.III.2 below.

2. Additional Terms and Conditions

- 2.a The permittee shall achieve initial compliance with the requirements of 40 CFR Part 63, Subpart CCC, no later than June 22, 2001.
- 2.b If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the Ohio EPA Northeast District Office may be used.
- 2.c The permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of 40 CFR Part 63, Subpart CCC.
- 2.d The permittee shall maintain a record of each inspection, including each item identified in Section A.III.2.iv, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

2. Additional Terms and Conditions (continued)

- 2.e** The particulate emissions limitation of 50.2 pounds per hour is based upon a process weight rate of 90 tons per hour and Table I of OAC rule 3745-17-11. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II of OAC rule 3745-17-11 is more stringent than 50.2 lbs/hour, the permittee shall comply with the more stringent limitation.

II. Operational Restrictions

1. The wet scrubber water flow rate shall be continuously maintained at a value of not less than 9.75 gallons per minute at all times while the emissions unit is in operation.
2. As required by section 63.6(e)(3) of 40 CFR Part 63, Subpart A, the permittee shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the emissions unit during periods of startup, shutdown, or malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the 40 CFR Part 63, Subpart CCC.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the water flow rate across the wet scrubber while the emissions unit is in operation. The monitoring device used to monitor the water flow rate across the wet scrubber shall be certified to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year. The monitoring device and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall collect and record the following information each shift while the wet scrubber is operating:

- a. the wet scrubber water flow rate, in gallons per minute; and
- b. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

III. Monitoring and/or Record Keeping Requirements (continued)

- 2.** The permittee shall implement an operation and maintenance plan for each emission control device by not later than the compliance date of June 22, 2001, in accordance with 40 CFR Part 63, Subpart CCC. The plan must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum:
 - i. require monitoring and recording the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance;
 - ii. require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans;
 - iii. require cleaning of the scrubber internals at intervals sufficient to prevent buildup of solids or other fouling; and
 - iv. require an inspection of the scrubber at intervals of no less than 3 months with:
 - (a) cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;
 - (b) repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;
 - (c) repair or replacement of droplet eliminator elements as needed;
 - (d) repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and
 - (e) adjustment of damper settings for consistency with the required air flow.
- 3.** The permittee shall maintain records for 5 years from the date of each record of:
 - 3.a** the occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
 - 3.b** the occurrence and duration of each malfunction of the air pollution control equipment;
 - 3.c** all maintenance performed on the air pollution control equipment;
 - 3.d** actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;
 - 3.e** all information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan;
 - 3.f** all required measurements needed to demonstrate compliance with 40 CFR Part 63, Subpart CCC, and to support the data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;
 - 3.g** all results of initial or subsequent performance tests;
 - 3.h** all documentation supporting initial notifications and notifications of compliance status; and
 - 3.i** records of any applicability determination, including supporting analyses.

III. Monitoring and/or Record Keeping Requirements (continued)

4. In addition to the general records required in Section A.III.3 of these terms and conditions, the permittee shall maintain records for 5 years from the date of each record of:
 - a. scrubber makeup water flow rate and recirculation water flow rate;
 - b. calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and
 - c. each maintenance inspection and repair, replacement, or other corrective action.
5. The permittee shall keep the written operation and maintenance plan on record to be made available for inspection, upon request, by the Ohio EPA Northeast District Office for the life of the emissions unit or until the emissions unit is no longer subject to the provisions of 40 CFR Part 63, Subpart CCC. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by the Ohio EPA Northeast District Office for a period of 5 years after each revision to the plan.
6. All records required by Sections A.III.3 and A.III.4 of these terms and conditions for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the wet scrubber water flow rate was not maintained at or above the required level.
2. As required by section 63.10(d)(5)(i) of 40 CFR Part 63, Subpart A, the permittee shall submit the following reports:
 - a. If actions taken by the permittee during a startup, shutdown, or malfunction of the emissions unit (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the permittee shall state such information in a semiannual report. The report, to be certified by the owner or operator or other responsible official, shall be submitted semiannually and delivered or postmarked by the 31st day following the end of each calendar half.
 - b. Any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of section 63.10(d)(5)(ii) of 40 CFR Part 63, Subpart A.

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions from the wet scrubber outlet shall not exceed twenty percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:

Particulate emissions from the wet scrubber outlet from steel pickling line number 5 shall not exceed 50.2 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 or 26A and the procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

HCl emissions from the wet scrubber outlet from steel pickling line number 5 shall not exceed 18 parts per million by volume (ppmv).

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 26A.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted every 2.5 years in accordance with 40 CFR Part 63, Subpart CCC.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limitation for HCl.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

V. Testing Requirements (continued)

3. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted during the first test for HCl following the effective date of this permit.
 - b. The emission testing shall be conducted at the outlet of the scrubber to demonstrate compliance with the allowable mass emission limitation for particulates.
 - c. A particulate emissions test also shall be conducted at the inlet of the scrubber to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11.
 - d. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 and/or 26A of 40 CFR Part 60, Appendix A.
 - e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
 - f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

4. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 6 Continuous Pickler (P003)

Activity Description: Wean Engineering continuous pickling line using HCl with coil welder.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Number 6 continuous steel pickling line using HCl, equipped with a wet scrubber	OAC rule 3745-17-11(B)(1)	Particulate emissions from the wet scrubber outlet from steel pickling line number 6 shall not exceed 50.2 pounds per hour. See A.I.2.e below.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the wet scrubber outlet shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
	40 CFR Part 63, Subpart CCC	HCl emissions from the wet scrubber outlet from steel pickling line number 6 shall not exceed 18 parts per million by volume (ppmv). See A.I.2.a through A.I.2.d, A.II.2, and A.III.2 below.

2. Additional Terms and Conditions

- 2.a The permittee shall achieve initial compliance with the requirements of 40 CFR Part 63, Subpart CCC, no later than June 22, 2001.
- 2.b If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the Ohio EPA Northeast District Office may be used.
- 2.c The permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of 40 CFR Part 63, Subpart CCC.
- 2.d The permittee shall maintain a record of each inspection, including each item identified in Section A.III.2.iv, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.

2. Additional Terms and Conditions (continued)

- 2.e** The particulate emissions limitation of 50.2 pounds per hour is based upon a process weight rate of 90 tons per hour and Table I of OAC rule 3745-17-11. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II of OAC rule 3745-17-11 is more stringent than 50.2 lbs/hour, the permittee shall comply with the more stringent limitation.

II. Operational Restrictions

1. The wet scrubber water flow rate shall be continuously maintained at a value of not less than 8 gallons per minute at all times while the emissions unit is in operation.
2. As required by section 63.6(e)(3) of 40 CFR Part 63, Subpart A, the permittee shall develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the emissions unit during periods of startup, shutdown, or malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the 40 CFR Part 63, Subpart CCC.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the water flow rate across the wet scrubber while the emissions unit is in operation. The monitoring device used to monitor the water flow rate across the wet scrubber shall be certified to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year. The monitoring device and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall collect and record the following information each shift while the wet scrubber is operating:

- a. the wet scrubber water flow rate, in gallons per minute; and
- b. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

III. Monitoring and/or Record Keeping Requirements (continued)

- 2.** The permittee shall implement an operation and maintenance plan for each emission control device by not later than the compliance date of June 22, 2001, in accordance with 40 CFR Part 63, Subpart CCC. The plan must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum:
 - i. require monitoring and recording the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance;
 - ii. require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans;
 - iii. require cleaning of the scrubber internals at intervals sufficient to prevent buildup of solids or other fouling; and
 - iv. require an inspection of the scrubber at intervals of no less than 3 months with:
 - (a) cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;
 - (b) repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;
 - (c) repair or replacement of droplet eliminator elements as needed;
 - (d) repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and
 - (e) adjustment of damper settings for consistency with the required air flow.
- 3.** The permittee shall maintain records for 5 years from the date of each record of:
 - 3.a** the occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
 - 3.b** the occurrence and duration of each malfunction of the air pollution control equipment;
 - 3.c** all maintenance performed on the air pollution control equipment;
 - 3.d** actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;
 - 3.e** all information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan;
 - 3.f** all required measurements needed to demonstrate compliance with 40 CFR Part 63, Subpart CCC, and to support the data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;
 - 3.g** all results of initial or subsequent performance tests;
 - 3.h** all documentation supporting initial notifications and notifications of compliance status; and
 - 3.i** records of any applicability determination, including supporting analyses.

III. Monitoring and/or Record Keeping Requirements (continued)

4. In addition to the general records required in Section A.III.3 of these terms and conditions, the permittee shall maintain records for 5 years from the date of each record of:
 - a. scrubber makeup water flow rate and recirculation water flow rate;
 - b. calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and
 - c. each maintenance inspection and repair, replacement, or other corrective action.
5. The permittee shall keep the written operation and maintenance plan on record to be made available for inspection, upon request, by the Ohio EPA Northeast District Office for the life of the emissions unit or until the emissions unit is no longer subject to the provisions of 40 CFR Part 63, Subpart CCC. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by the Ohio EPA Northeast District Office for a period of 5 years after each revision to the plan.
6. All records required by sections A.III.3 and A.III.4 of these terms and conditions for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber water flow rate was not maintained at or above the required level.
2. As required by section 63.10(d)(5)(i) of 40 CFR Part 63, Subpart A, the permittee shall submit the following reports:
 - a. If actions taken by the permittee during a startup, shutdown, or malfunction of the emissions unit (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the permittee shall state such information in a semiannual report. The report, to be certified by the owner or operator or other responsible official, shall be submitted semiannually and delivered or postmarked by the 31st day following the end of each calendar half.
 - b. Any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of section 63.10(d)(5)(ii) of 40 CFR Part 63, Subpart A.

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions from the wet scrubber outlet shall not exceed twenty percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:

Particulate emissions from the wet scrubber outlet from steel pickling line number 6 shall not exceed 50.2 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 5 or 26A and the procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

HCl emissions from the wet scrubber outlet from steel pickling line number 6 shall not exceed 18 parts per million by volume (ppmv).

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 26A.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted every 2.5 years in accordance with 40 CFR Part 63, Subpart CCC.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limitation for HCl.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.
- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
- e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

V. Testing Requirements (continued)

3. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted during the first test for HCl following the effective date of this permit.
 - b. The emission testing shall be conducted at the outlet of the scrubber to demonstrate compliance with the allowable mass emission limitation for particulates.
 - c. A particulate emissions test also shall be conducted at the inlet of the scrubber to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11.
 - d. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 and/or 26A of 40 CFR Part 60, Appendix A.
 - e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
 - f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

4. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 54" Tandem Mill No. 42 (P005)
Activity Description: Continental Mill for reduction of steel strip using soluble oil.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
54" tandem mill no. 42 for reduction of steel strip using soluble oil	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack associated with this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the stack associated with this emissions unit shall not exceed 50.6 pounds per hour. See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The particulate emissions limitation of 50.6 pounds per hour is based upon a process weight rate of 93.6 tons per hour and Table I of OAC rule 3745-17-11. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II of OAC rule 3745-17-11 is more stringent than 50.6 lbs/hour, the permittee shall comply with the more stringent limitation.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all weeks during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions from any stack associated with this emissions unit shall not exceed 20 percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions from the stack associated with this emissions unit shall not exceed 50.6 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted once, within 3 months after any visible emissions are detected from the stack.
 - b. The emission testing shall be conducted at the outlet of the settling chamber to demonstrate compliance with the allowable mass emission limitation for particulates.
 - c. A particulate emissions test also shall be conducted at the inlet of the settling chamber to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11.
 - d. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60, Appendix A.
 - e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
 - f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
3. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Continuous Silicon Steel Anneal Furnace (P011)

Activity Description: Continuous silicon steel processing line annealing section and coil welder.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
295 mmBtu/hr natural gas fired continuous silicon steel processing line annealing furnace	OAC rule 3745-31-05(A)(3) PTI 02-190	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-10(B)(1) and 3745-17-07(A).
	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.
	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-18-06(A)	See Section A.I.2.a below.

2. Additional Terms and Conditions

- 2.a OAC rule 3745-18-06(A) does not establish sulfur dioxide emission limitations for the fuel burning equipment associated with this emissions unit because the emissions unit only employs natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions (a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet). Because the natural gas being burned in this emissions unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).

II. Operational Restrictions

1. The permittee shall only employ natural gas to heat the continuous silicon steel processing line annealing furnace.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

- 1.b Emission Limitation:

Particulate emissions shall not exceed 0.020 pound per million Btu of actual heat input.

Applicable Compliance Method:

To determine the actual emission rate for particulate matter from natural gas, the following equation may be used:

$$(1.9 \text{ lb}/10^6 \text{ scf}) \times (1 \text{ scf}/1000 \text{ Btu}) \times (1,000,000 \text{ Btu}/\text{mmBtu}) = 0.0019 \text{ lb}/\text{mmBtu}$$

Where:

E = particulate emission rate from burning natural gas, in lb/mmBtu;

1.9 lb/10⁶ scf = emission factor for filterable particulate material from burning natural gas from AP42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1000 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 56" Mill Reheat Furnace #2 (P016)

Activity Description: Rust Engineering 750 MMBtu/Hr furnace fired with mixed gas or coke oven gas.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
750 mmBtu/hr, 56" mill reheat furnace, direct fired with natural gas, coke oven gas, or a mixture of natural gas and coke oven gas	OAC rule 3745-17-11	None. See A.I.2.a below.
	OAC rule 3745-17-07(A)	None. See A.I.2.b below.
	OAC rule 3745-18-84(I)	Sulfur dioxide emissions shall not exceed 1.7 lbs/mmBtu actual heat input.

2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate matter emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

II. Operational Restrictions

1. To ensure ongoing compliance with the sulfur dioxide emission limitation of 1.7 lbs/mmBtu actual heat input, the permittee shall burn in this emissions unit only natural gas, coke oven gas with a concentration of H₂S less than 100 grains per 100 dry standard cubic feet (as an average for each rolling, 3-hour period), or a mixture of natural gas and coke oven gas with a concentration of H₂S less than 100 grains per 100 dry standard cubic feet (as an average for each rolling, 3-hour period), unless the permittee demonstrates through calculations that during periods when coke oven gas containing greater than 100 grains per 100 dry standard cubic feet is burned, the sulfur dioxide emission rate is less than 1.7 lbs/mmBtu actual heat input.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, coke oven gas, or a mixture of natural gas and coke oven gas the permittee shall maintain a record of the type, quantity, and quality of fuel burned in this emissions unit.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall continuously monitor and record the sulfur content of the coke oven gas burned in this emissions unit to ensure that the concentration of sulfur compounds is less than 100 grains per 100 dry standard cubic feet (as an average for each rolling, 3-hour period). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the continuous sulfur dioxide and total reduced sulfur monitoring systems including, but not limited to, the grains of hydrogen sulfide per 100 dry standard cubic feet (dscf) for the coke oven gas on a daily average basis, based upon the average emission rate for the actual hours of operation for this emissions unit during each calendar day.

In lieu of the above requirement, the permittee may accept the coke oven gas supplier's monitoring and record keeping for sulfur content in the coke oven gas if said monitoring and record keeping meets the requirements of 40 CFR Part 60.13.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas and/or coke oven gas was burned in this emission unit.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour period during which the concentration of H₂S in the coke oven gas burned in this emissions unit exceeded 100 grains per 100 dscf, and the actual H₂S content for each such 3-hour period. For each 3-hour period that exceeds 100 grains per 100 dscf, the permittee may provide calculations that demonstrate that during that 3-hour period the sulfur dioxide emission rate did not exceed 1.7 lbs/mmBtu actual heat input. If the permittee makes this demonstration for any 3-hour period, the exceedance of the 100 grains per 100 dscf limitation shall not be considered a deviation of the operational restriction in Section A.II.1.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

Sulfur dioxide emissions shall not exceed 1.7 lbs/mmBtu actual heat input.

Applicable Compliance Method:

(i) To determine the actual emission rate for SO₂ from natural gas, the following equation may be used:

$$E \text{ (lb/mmBtu)} = (0.6 \text{ lb}/10^6 \text{ scf}) \times (1 \text{ scf}/1073 \text{ Btu}) \times (1,000,000 \text{ Btu/mmBtu})$$

Where:

E = SO₂ emission rate from natural gas, in lb/mmBtu;

0.6 lb/10⁶ scf = emission factor for SO₂ from burning natural gas from AP42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1073 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the actual emission rate for SO₂ from coke oven gas, the following equation may be used:

To determine the actual emission rate for SO₂ from coke oven gas, the following equation may be used:

$$E \text{ (lb/mmBtu)} = (\text{H}_2\text{S content}) \times (1 \text{ lb}/7000 \text{ grains}) \times (1 \text{ scf}/580 \text{ Btu}) \times (64 \text{ SO}_2/34 \text{ H}_2\text{S}) \times (1,000,000 \text{ Btu/mmBtu})$$

Where:

E = SO₂ emission rate from coke oven gas, in lb/mmBtu;

H₂S content = grains of H₂S in 100 scf of coke oven gas recorded in Section A.III.2;

1 lb/7000 grains = conversion from pounds to grains;

1 scf/580 Btu = the heat value of 1 scf of coke oven gas;

64 SO₂/34 H₂S = the ratio of grams per mole of SO₂ to mole of H₂S; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(iii) If required, the permittee shall demonstrate compliance with this emission rate in accordance with 40 CFR Part 60, Appendix A, Methods 6 or 6C and the procedures in OAC rule 3745-18-04.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 56" Mill Reheat Furnace #3 (P017)

Activity Description: Rust Engineering 750 MMBtu/Hr furnace fired with mixed gas or coke oven gas.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
750 mmBtu/hr, 56" mill reheat furnace, direct fired with natural gas, coke oven gas, or a mixture of natural gas and coke oven gas	OAC rule 3745-17-11	None. See A.I.2.a below.
	OAC rule 3745-17-07(A)	None. See A.I.2.b below.
	OAC rule 3745-18-84(I)	Sulfur dioxide emissions shall not exceed 1.7 lbs/mmBtu actual heat input.

2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate matter emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

II. Operational Restrictions

1. To ensure ongoing compliance with the sulfur dioxide emission limitation of 1.7 lbs/mmBtu actual heat input, the permittee shall burn in this emissions unit only natural gas, coke oven gas with a concentration of H₂S less than 100 grains per 100 dry standard cubic feet (as an average for each rolling, 3-hour period), or a mixture of natural gas and coke oven gas with a concentration of H₂S less than 100 grains per 100 dry standard cubic feet (as an average for each rolling, 3-hour period), unless the permittee demonstrates through calculations that during periods when coke oven gas containing greater than 100 grains per 100 dry standard cubic feet is burned, the sulfur dioxide emission rate is less than 1.7 lbs/mmBtu actual heat input.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, coke oven gas, or a mixture of natural gas and coke oven gas the permittee shall maintain a record of the type, quantity, and quality of fuel burned in this emissions unit.

III. Monitoring and/or Record Keeping Requirements (continued)

2. The permittee shall continuously monitor and record the sulfur content of the coke oven gas burned in this emissions unit to ensure that the concentration of sulfur compounds is less than 100 grains per 100 dry standard cubic feet (as an average for each rolling, 3-hour period). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

The permittee shall maintain records of all data obtained by the continuous sulfur dioxide and total reduced sulfur monitoring systems including, but not limited to, the grains of hydrogen sulfide per 100 dry standard cubic feet (dscf) for the coke oven gas on a daily average basis, based upon the average emission rate for the actual hours of operation for this emissions unit during each calendar day.

In lieu of the above requirement, the permittee may accept the coke oven gas supplier's monitoring and record keeping for sulfur content in the coke oven gas if said monitoring and record keeping meets the requirements of 40 CFR Part 60.13.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas and/or coke oven gas was burned in this emission unit.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each rolling, 3-hour period during which the concentration of H₂S in the coke oven gas burned in this emissions unit exceeded 100 grains per 100 dscf, and the actual H₂S content for each such 3-hour period. For each 3-hour period that exceeds 100 grains per 100 dscf, the permittee may provide calculations that demonstrate that during that 3-hour period the sulfur dioxide emission rate did not exceed 1.7 lbs/mmBtu actual heat input. If the permittee makes this demonstration for any 3-hour period, the exceedance of the 100 grains per 100 dscf limitation shall not be considered a deviation of the operational restriction in Section A.II.1.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

Sulfur dioxide emissions shall not exceed 1.7 lbs/mmBtu actual heat input.

Applicable Compliance Method:

(i) To determine the actual emission rate for SO₂ from natural gas, the following equation may be used:

$$E \text{ (lb/mmBtu)} = (0.6 \text{ lb}/10^6 \text{ scf}) \times (1 \text{ scf}/1073 \text{ Btu}) \times (1,000,000 \text{ Btu/mmBtu})$$

Where:

E = SO₂ emission rate from natural gas, in lb/mmBtu;

0.6 lb/10⁶ scf = emission factor for SO₂ from burning natural gas from AP42, Section 1.4 Natural Gas Combustion, Table 1.4-2, 7/98;

1 scf/1073 Btu = the heat value of 1 scf of natural gas; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(ii) To determine the actual emission rate for SO₂ from coke oven gas, the following equation may be used:

To determine the actual emission rate for SO₂ from coke oven gas, the following equation may be used:

$$E \text{ (lb/mmBtu)} = (\text{H}_2\text{S content}) \times (1 \text{ lb}/7000 \text{ grains}) \times (1 \text{ scf}/580 \text{ Btu}) \times (64 \text{ SO}_2/34 \text{ H}_2\text{S}) \times (1,000,000 \text{ Btu/mmBtu})$$

Where:

E = SO₂ emission rate from coke oven gas, in lb/mmBtu;

H₂S content = grains of H₂S in 100 scf of coke oven gas recorded in Section A.III.2;

1 lb/7000 grains = conversion from pounds to grains;

1 scf/580 Btu = the heat value of 1 scf of coke oven gas;

64 SO₂/34 H₂S = the ratio of grams per mole of SO₂ to mole of H₂S; and

1,000,000 Btu/mmBtu = conversion from Btu to mmBtu.

(iii) If required, the permittee shall demonstrate compliance with this emission rate in accordance with 40 CFR Part 60, Appendix A, Methods 6 or 6C and the procedures in OAC rule 3745-18-04.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #1 Slab Grinder (P026)
Activity Description: Mid-West Abrasive Slab Grinder.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Steel slab conditioning grinder #1, equipped with a baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the baghouse outlet shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(3)	See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	The emission limitation established pursuant to this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3) PTI 02-4512	Particulate emissions shall not exceed 0.010 grain per dry standard cubic foot of exhaust gases from the baghouse outlet. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11), OAC rule 3745-17-07(B)(1) through (9) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. Steel slab conditioning grinder #1 is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. Steel slab conditioning grinder #1 is not located within the areas identified in "Appendix A" of the rule.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 6 inches of water while the emissions unit is in operation. The pressure drop shall not be considered outside the normal range when the pressure drop falls below the minimum point in the pressure differential range as a result of bag replacements.

The permittee may petition the Northeast District Office for reestablishment of the pressure drop range at any time provided the permittee can demonstrate to the Northeast District Office that the operating conditions upon which the pressure drop range was previously established are not longer applicable.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse was not within the allowable range specified above.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions from the baghouse outlet shall not exceed twenty percent opacity as a six-minute average, except as provided by OAC rule 3745-17-07.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:

Particulate emissions shall not exceed 0.010 grain per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

If required, compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #2 Slab Grinder (P027)
Activity Description: Mid-West Abrasive Slab Grinder.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Steel slab conditioning grinder #2, equipped with a baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the baghouse outlet shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(3)	See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	The emission limitation established pursuant to this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-31-05(A)(3) PTI 02-4512	Particulate emissions shall not exceed 0.010 grain per dry standard cubic foot of exhaust gases from the baghouse outlet.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11), OAC rule 3745-17-07(B)(1) through (9) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. Steel slab conditioning grinder #2 is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. Steel slab conditioning grinder #2 is not located within the areas identified in "Appendix A" of the rule.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 8 inches of water while the emissions unit is in operation. The pressure drop shall not be considered outside the normal range when the pressure drop falls below the minimum point in the pressure differential range as a result of bag replacements.

The permittee may petition the Northeast District Office for reestablishment of the pressure drop range at any time provided the permittee can demonstrate to the Northeast District Office that the operating conditions upon which the pressure drop range was previously established are not longer applicable.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse was not within the allowable range specified above.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions from the baghouse outlet shall not exceed twenty percent opacity as a six-minute average, except as provided by OAC rule 3745-17-07.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:

Particulate emissions shall not exceed 0.010 grain per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

If required, compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Ladle Metallurgical Station (P028)
Activity Description: Ladle Metallurgical Refining Facility in BOF Shop.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Ladle refining process, including alloying material additions, argon stirring, and electric arc reheating, equipped with a baghouse for particulate control	OAC rule 3745-31-05(A)(3) PTI 02-4963	Visible particulate emissions from the baghouse outlet shall not exceed five percent opacity as a six-minute average.
		Particulate emissions from the baghouse outlet from the ladle refining process shall not exceed 0.0052 grain per dry standard cubic foot of exhaust gases. See A.I.2.c below.
	OAC rule 3745-17-07(B)(3)	None. See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	None. See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a** Pursuant to OAC rule 3745-17-07(B)(11), OAC rule 3745-17-07(B)(1) through (9) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. The ladle refining process is not located within the areas identified in "Appendix A" of the rule.
- 2.b** Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The ladle refining process is not located within the areas identified in "Appendix A" of the rule.
- 2.c** All equipment and processes associated with this emissions unit, including alloying material additions, argon stirring, and electric arc reheating, shall be vented to the baghouse.

II. Operational Restrictions

- 1.** The pressure drop across the baghouse shall be maintained within the range of 2 to 8 inches of water while the emissions unit is in operation. The pressure drop shall not be considered outside the normal range when the pressure drop falls below the minimum point in the pressure differential range as a result of bag replacements.

The permittee may petition the Northeast District Office for reestablishment of the pressure drop range at any time provided the permittee can demonstrate to the Northeast District Office that the operating conditions upon which the pressure drop range was previously established are not longer applicable.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.
- 2.** The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

- 1.** The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse was not within the allowable range specified above.
- 2.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

Visible particulate emissions from the baghouse outlet shall not exceed five percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

- 1.b Emission Limitation:

Particulate emissions from the baghouse outlet from the ladle refining process shall not exceed 0.0052 grain per dry standard cubic foot of exhaust gases.

Applicable Compliance Method:

If required, compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months prior to permit expiration.

- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limit for particulate emissions.

- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60, Appendix A.

- d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s).

Facility Name: **WCI Steel, Inc.**
Facility ID: **02-78-00-0463**
Emissions Unit: **Ladle Metallurgical Station (P028)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Vacuum Degasser (P029)
Activity Description: Vacuum Degasser Metalurgical facility in BOF Shop.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Vacuum degassing process, including alloying material additions, argon stirring, and vacuum degassing, equipped with a natural gas fired flare/CO burner	OAC rule 3745-31-05(A)(3) PTI 02-4963	Emissions of carbon monoxide from the vacuum degassing process shall not exceed 1.4 pounds per hour. See A.1.2.a below.
		Emissions of carbon monoxide from the vacuum degassing process shall be reduced by at least ninety-eight percent (98%) by weight. See A.1.2.a below.
		Visible particulate emissions from the vacuum degassing process shall not exceed five percent opacity as a six-minute average.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07 and 3745-17-11.
	OAC rule 3745-17-07(B)(3)	None. See A.1.2.b below.
	OAC rule 3745-17-08(B)(3)	None. See A.1.2.c below.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the stack associated with this emissions unit shall not exceed 55.4 pounds per hour.
	OAC rule 3745-17-07(A)(1)	The emission limitation established pursuant to this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

- 2.a Stack test methods are not available to sample CO emissions after the natural gas fired flare/CO burner. Therefore, compliance with the CO emissions limitation and the requirement for 98% by weight CO emissions reduction shall be based upon flare design and the April 1996 report entitled "Dispersion Modeling Analysis of the Existing CO Flare at the WCI Steel, Inc., Plant Warren, Ohio" prepared by Environmental Quality Management, Inc.
- 2.b Pursuant to OAC rule 3745-17-07(B)(11), OAC rule 3745-17-07(B)(1) through (9) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC 3745-17-08. The vacuum degassing process is not located within the areas identified in "Appendix A" of the rule.
- 2.c Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The vacuum degassing process is not located within the areas identified in "Appendix A" of the rule.
- 2.d All equipment and processes associated with this emissions unit, including alloying material additions, argon stirring, and vacuum degassing, shall be vented to the flare.

II. Operational Restrictions

- 1. A pilot flame shall be maintained at all times in the flare's pilot light burner.

III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall properly operate and maintain a device to continuously monitor the pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall record the following information each day while the emissions unit is in operation:

- a. All periods during which there was no pilot flame while the emissions unit is in operation.
 - b. The operating times for the flare, monitoring equipment, and the associated emissions unit.
- 2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

- 1. The permittee shall submit deviation (excursion) reports that identify all periods when the emissions unit was in operation during which the pilot flame was not functioning properly. The reports shall include the date, time, and duration of such period.

IV. Reporting Requirements (continued)

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

Visible particulate emissions from the vacuum degassing process shall not exceed five percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modification listed in paragraph (B)(3)(b) of OAC rule 3745-17-03.

- 1.b Emission Limitation:

Particulate emissions from the stack associated with this emissions unit shall not exceed 55.4 pounds per hour.

Applicable Compliance Method:

If required, compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Horiz. Steel Ladle Dryer/Preheater (P034)
Activity Description: 20 MMBtu/Hr ladle refractory dryer in BOF Shop.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
20 mmBtu/hr, natural gas fired, horizontal steel ladle dryer/preheater	OAC rule 3745-31-05(A)(3) PTI 02-0238	Particulate emissions shall not exceed 0.12 pound per hour.
		SO ₂ emissions shall not exceed 0.01 pound per hour.
		NO _x emissions shall not exceed 2.61 pounds per hour.
		CO emissions shall not exceed 1.6 pounds per hour.
		VOC emissions shall not exceed 0.1 pound per hour.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-23-06 and OAC rule 3745-21-08.
	OAC rule 3745-17-07(B)(1)	See Section A.I.2.a below.
	OAC rule 3745-17-08(B)	See Section A.I.2.b below.
OAC rule 3745-18-06(E)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).	
OAC rule 3745-21-08	See Section A.I.2.c below.	
OAC rule 3745-23-06	See Section A.I.2.c below.	

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. The 20 mmBtu/hr, natural gas fired, horizontal steel ladle dryer/preheater is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The 20 mmBtu/hr, natural gas fired, horizontal steel ladle dryer/preheater is not located within the areas identified in "Appendix A" of the rule.
- 2.c The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install # 02-0238.

II. Operational Restrictions

- 1. The permittee shall only employ natural gas as fuel to dry/preheat the ladle.

III. Monitoring and/or Record Keeping Requirements

- 1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.

V. Testing Requirements

- 1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emissions Limitation:

Particulate emissions shall not exceed 0.12 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 1.9 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.b Emissions Limitation:

SO₂ emissions shall not exceed 0.01 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 0.60 lb/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

V. Testing Requirements (continued)

1.c Emissions Limitation:

NOx emissions shall not exceed 2.61 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 100 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-1, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.d Emissions Limitation:

CO emissions shall not exceed 1.6 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 84 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-1, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.e Emissions Limitation:

VOC emissions shall not exceed 0.1 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 5.5 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: North Vert. Steel Ladle Dryer/Preheater (P035)
Activity Description: 20 MMBtu/Hr ladle refractory dryer in BOF Shop.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
20 mmBtu/hr, natural gas fired, north vertical steel ladle dryer/preheater	OAC rule 3745-31-05(A)(3) PTI 02-0238	Particulate emissions shall not exceed 0.12 pound per hour.
		SO ₂ emissions shall not exceed 0.01 pound per hour.
		NO _x emissions shall not exceed 2.61 pounds per hour.
		CO emissions shall not exceed 1.6 pounds per hour.
		VOC emissions shall not exceed 0.1 pound per hour.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-23-06 and OAC rule 3745-21-08.
		See Section A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See Section A.I.2.b below.
	OAC rule 3745-17-08(B)	
	OAC rule 3745-18-06(E)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08	See Section A.I.2.c below.
	OAC rule 3745-23-06	See Section A.I.2.c below.

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. The 20 mmBtu/hr, natural gas fired, north vertical steel ladle dryer/preheater is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The 20 mmBtu/hr, natural gas fired, north vertical steel ladle dryer/preheater is not located within the areas identified in "Appendix A" of the rule.
- 2.c The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install # 02-0238.

II. Operational Restrictions

- 1. The permittee shall only employ natural gas as fuel to dry/preheat the ladle.

III. Monitoring and/or Record Keeping Requirements

- 1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.

V. Testing Requirements

- 1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emissions Limitation:

Particulate emissions shall not exceed 0.12 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 1.9 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.b Emissions Limitation:

SO₂ emissions shall not exceed 0.01 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 0.60 lb/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

V. Testing Requirements (continued)

1.c Emissions Limitation:

NOx emissions shall not exceed 2.61 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 100 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-1, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.d Emissions Limitation:

CO emissions shall not exceed 1.6 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 84 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-1, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.e Emissions Limitation:

VOC emissions shall not exceed 0.1 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 5.5 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: South Vert. Steel Ladle Dryer/Preheater (P036)
Activity Description: 20 MMBtu/Hr ladle refractory dryer in BOF Shop.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
20 mmBtu/hr, natural gas fired, south vertical steel ladle dryer/preheater	OAC rule 3745-31-05(A)(3) PTI 02-0238	Particulate emissions shall not exceed 0.12 pound per hour.
		SO ₂ emissions shall not exceed 0.01 pound per hour.
		NO _x emissions shall not exceed 2.61 pounds per hour.
		CO emissions shall not exceed 1.6 pounds per hour.
		VOC emissions shall not exceed 0.1 pound per hour.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-23-06 and OAC rule 3745-21-08.
		See Section A.I.2.a below.
	OAC rule 3745-17-07(B)(1)	See Section A.I.2.b below.
	OAC rule 3745-17-08(B)	
	OAC rule 3745-18-06(E)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-08	See Section A.I.2.c below.
	OAC rule 3745-23-06	See Section A.I.2.c below.

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. The 20 mmBtu/hr, natural gas fired, south vertical steel ladle dryer/preheater is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The 20 mmBtu/hr, natural gas fired, south vertical steel ladle dryer/preheater is not located within the areas identified in "Appendix A" of the rule.
- 2.c The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install # 02-0238.

II. Operational Restrictions

- 1. The permittee shall only employ natural gas as fuel to dry/preheat the ladle.

III. Monitoring and/or Record Keeping Requirements

- 1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.

V. Testing Requirements

- 1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emissions Limitation:

NOx emissions shall not exceed 2.61 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 1.9 lb/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.b Emissions Limitation:

SO2 emissions shall not exceed 0.01 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 0.60 lb/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

V. Testing Requirements (continued)

1.c Emissions Limitation:

NOx emissions shall not exceed 2.61 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 100 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-1, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.d Emissions Limitation:

CO emissions shall not exceed 1.6 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 84 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-1, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.e Emissions Limitation:

VOC emissions shall not exceed 0.1 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 20 mmBtu/hr, by the emission factor of 5.5 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BOF Vessel No. 1 Ladle Preheater (P037)
Activity Description: 10 MMBtu/Hr ladle refractory dryer in BOF Shop.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
10 mmBtu/hr, natural gas fired, BOF vessel no. 1 ladle preheater	OAC rule 3745-31-05(A)(3) PTI 02-0238	Particulate emissions shall not exceed 0.06 pound per hour.
		SO ₂ emissions shall not exceed 0.006 pound per hour.
		NO _x emissions shall not exceed 1.30 pounds per hour.
		CO emissions shall not exceed 0.783 pound per hour.
		VOC emissions shall not exceed 0.05 pound per hour.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-23-06 and OAC rule 3745-21-08.
	OAC rule 3745-17-07(B)(1)	See Section A.I.2.a below.
	OAC rule 3745-17-08(B)	See Section A.I.2.b below.
OAC rule 3745-18-06(E)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).	
OAC rule 3745-21-08	See Section A.I.2.c below.	
OAC rule 3745-23-06	See Section A.I.2.c below.	

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. The 10 mmBtu/hr, natural gas fired, BOF vessel no. 1 ladle preheater is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The 10 mmBtu/hr, natural gas fired, BOF vessel no. 1 ladle preheater is not located within the areas identified in "Appendix A" of the rule.
- 2.c The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install # 02-0238.

II. Operational Restrictions

- 1. The permittee shall only employ natural gas as fuel to preheat the ladle.

III. Monitoring and/or Record Keeping Requirements

- 1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.

V. Testing Requirements

- 1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emissions Limitation:

Particulate emissions shall not exceed 0.06 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 10 mmBtu/hr, by the emission factor of 1.9 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.b Emissions Limitation:

SO₂ emissions shall not exceed 0.006 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 10 mmBtu/hr, by the emission factor of 0.60 lb/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

V. Testing Requirements (continued)

1.c Emissions Limitation:

NOx emissions shall not exceed 1.30 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 10 mmBtu/hr, by the emission factor of 100 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-1, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.d Emissions Limitation:

CO emissions shall not exceed 0.783 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 10 mmBtu/hr, by the emission factor of 84 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-1, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.e Emissions Limitation:

VOC emissions shall not exceed 0.05 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 10 mmBtu/hr, by the emission factor of 5.5 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BOF Vessel No. 2 Ladle Preheater (P038)
Activity Description: 10 MMBtu/Hr ladle refractory dryer in BOF Shop.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
10 mmBtu/hr, natural gas fired, BOF vessel no. 2 ladle preheater	OAC rule 3745-31-05(A)(3) PTI 02-0238	Particulate emissions shall not exceed 0.06 pound per hour.
		SO2 emissions shall not exceed 0.006 pound per hour.
		NOx emissions shall not exceed 1.30 pounds per hour.
		CO emissions shall not exceed 0.783 pound per hour.
		VOC emissions shall not exceed 0.05 pound per hour.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-23-06 and OAC rule 3745-21-08.
	OAC rule 3745-17-07(B)(1)	See Section A.I.2.a below.
	OAC rule 3745-17-08(B)	See Section A.I.2.b below.
OAC rule 3745-18-06(E)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).	
OAC rule 3745-21-08	See Section A.I.2.c below.	
OAC rule 3745-23-06	See Section A.I.2.c below.	

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. The 10 mmBtu/hr, natural gas fired, BOF no. 2 ladle preheater is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The 10 mmBtu/hr, natural gas fired, BOF vessel no. 2 ladle preheater is not located within the areas identified in "Appendix A" of the rule.
- 2.c The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install # 02-0238.

II. Operational Restrictions

- 1. The permittee shall only employ natural gas as fuel to preheat the ladle.

III. Monitoring and/or Record Keeping Requirements

- 1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.

V. Testing Requirements

- 1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

- 1.a Emissions Limitation:

Particulate emissions shall not exceed 0.06 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 10 mmBtu/hr, by the emission factor of 1.9 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

- 1.b Emissions Limitation:

SO₂ emissions shall not exceed 0.006 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 10 mmBtu/hr, by the emission factor of 0.60 lb/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

V. Testing Requirements (continued)

1.c Emissions Limitation:

NOx emissions shall not exceed 1.30 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 10 mmBtu/hr, by the emission factor of 100 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-1, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.d Emissions Limitation:

CO emissions shall not exceed 0.783 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 10 mmBtu/hr, by the emission factor of 84 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-1, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.e Emissions Limitation:

VOC emissions shall not exceed 0.05 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 10 mmBtu/hr, by the emission factor of 5.5 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Iron Ladle Drying Stand (P039)
Activity Description: 15 MMBtu/Hr ladle refractory dryer in BOF Shop.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
15 mmBtu/hr, natural gas fired, iron ladle drying stand	OAC rule 3745-31-05(A)(3) PTI 02-0238	Particulate emissions shall not exceed 0.09 pound per hour.
		SO ₂ emissions shall not exceed 0.008 pound per hour.
		NO _x emissions shall not exceed 1.96 pounds per hour.
		CO emissions shall not exceed 1.20 pounds per hour.
		VOC emissions shall not exceed 0.08 pound per hour.
		The requirements of this rule also include compliance with the requirements of OAC rule 3745-23-06 and OAC rule 3745-21-08.
	OAC rule 3745-17-07(B)(1)	See Section A.I.2.a below.
	OAC rule 3745-17-08(B)	See Section A.I.2.b below.
OAC rule 3745-18-06(E)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).	
OAC rule 3745-21-08	See Section A.I.2.c below.	
OAC rule 3745-23-06	See Section A.I.2.c below.	

2. Additional Terms and Conditions

- 2.a Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. The 15 mmBtu/hr, natural gas fired, iron ladle drying stand is not located within the areas identified in "Appendix A" of the rule.
- 2.b Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. The 15 mmBtu/hr, natural gas fired, iron ladle drying stand is not located within the areas identified in "Appendix A" of the rule.
- 2.c The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install # 02-0238.

II. Operational Restrictions

- 1. The permittee shall only employ natural gas as fuel for the iron ladle drying stand.

III. Monitoring and/or Record Keeping Requirements

- 1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit.

V. Testing Requirements

- 1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emissions Limitation:

Particulate emissions shall not exceed 0.09 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 15 mmBtu/hr, by the emission factor of 1.9 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.b Emissions Limitation:

SO₂ emissions shall not exceed 0.008 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 15 mmBtu/hr, by the emission factor of 0.60 lb/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

V. Testing Requirements (continued)

1.c Emissions Limitation:

NOx emissions shall not exceed 1.96 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 15 mmBtu/hr, by the emission factor of 100 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-1, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.d Emissions Limitation:

CO emissions shall not exceed 1.20 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 15 mmBtu/hr, by the emission factor of 84 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-1, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

1.e Emissions Limitation:

VOC emissions shall not exceed 0.08 pound per hour.

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum rated capacity of the fuel burner, 15 mmBtu/hr, by the emission factor of 5.5 lbs/mmcf from AP-42, Fifth Edition, Section 1.4, Table 1.4-2, July 1998. The product shall then be multiplied by the conversion factor of 1 cf/1073 Btu.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 54" Temper Mill (P040)
Activity Description: Single Stand 4-High Cold Rolling Mill

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
54" temper mill, equipped with mist eliminators	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack associated with this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the stack associated with this emissions unit shall not exceed 52.1 pounds per hour. See A.I.2.a below.

2. Additional Terms and Conditions

- 2.a The particulate emissions limitation of 52.1 pounds per hour is based upon a process weight rate of 108 tons per hour and Table I of OAC rule 3745-17-11. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II of OAC rule 3745-17-11 is more stringent than 52.1 lbs/hour, the permittee shall comply with the more stringent limitation.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all weeks during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions from any stack associated with this emissions unit shall not exceed 20 percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Particulate emissions from the stack associated with this emissions unit shall not exceed 52.1 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted once, within 3 months after any visible emissions are detected from the stack.
 - b. The emission testing shall be conducted at the outlet of the settling chamber to demonstrate compliance with the allowable mass emission limitation for particulates.
 - c. A particulate emissions test also shall be conducted at the inlet of the mist eliminators to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11.
 - d. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60, Appendix A.
 - e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
 - f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
3. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Blast Furnace (P901)

Activity Description: Coke-fired blast furnace includes charging, stoves, waste gas flare, furnace upsets, tapping from two casthouses (w/baghouse) and slag pit.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Coke-fired blast furnace, equipped with a baghouse for casthouse fugitive emissions, a fixed throat venturi scrubber for the primary emissions, and waste gas flare	OAC rule 3745-18-06(E)(1)	Sulfur dioxide emissions from the stove stacks shall not exceed 740.3 lbs/hour.
	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from blast furnace charging shall not exceed twenty percent opacity as a three-minute average.
	OAC rule 3745-17-08(B)(3)	The permittee shall employ reasonably available control measures during charging that are sufficient to minimize or eliminate visible emissions of fugitive dust from blast furnace charging. See A.1.2.a below.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the blast furnace stove stacks shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	Particulate emissions from the blast furnace stove stacks shall not exceed 65.7 pounds per hour. See A.1.2.b below.
	OAC rule 3745-31-05(A)(3) PTI 02-484	The emission limitation established pursuant to this rule for particulate emissions from casthouse #1 is equivalent to the emission limitation established pursuant to 40 CFR 52.21 and PSD permit #5-79-A-8.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the baghouse for casthouse #1 shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-08(B)(3)	The emission limitation/control requirements established pursuant to this rule for casthouse #1 are less stringent than the emission limitation/control requirements established pursuant to 40 CFR 52.21.
	OAC rule 3745-17-07(B)(3)	Visible particulate emissions of fugitive dust from the casthouse #1 roof monitors shall not exceed twenty percent opacity as a six-minute average.
	40 CFR 52.21 PSD permit #5-79-A-8	Particulate emissions from the baghouse for casthouse #1 shall not exceed 0.030 lb/ton of iron produced.
		The emissions from the iron and slag notches to skimmer area and the spouts in casthouse #1 shall be hooded and exhausted to the baghouse for casthouse #1. See A.1.2.c below.
	OAC rule 3745-31-05(A)(3) PTI 02-484	The emission limitation established pursuant to this rule for particulate emissions from casthouse #2 is equivalent to the emission limitation established pursuant to 40 CFR 52.21 and PSD permit #5-79-A-8.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the baghouse for casthouse #2 shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-08(B)(3)	The emission limitation/control requirements established pursuant to this rule for casthouse #2 are less stringent than the emission limitation/control requirements established pursuant to 40 CFR 52.21.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-07(B)(3)	Visible particulate emissions of fugitive dust from the casthouse #2 roof monitors shall not exceed twenty percent opacity as a six-minute average.
	40 CFR 52.21 PSD permit #5-79-A-8	Particulate emissions from the baghouse for casthouse #2 shall not exceed 0.030 lb/ton of iron produced.
		The emissions from the iron and slag notches, spouts, and runners in casthouse #2 shall be hooded and exhausted to the baghouse for casthouse #2. See A.I.2.d below.

2. Additional Terms and Conditions

- 2.a** The permittee shall charge this emissions unit only with screened or low fines raw materials in order to minimize or eliminate visible particulate emissions of fugitive dust.
- 2.b** Based upon Table I in OAC rule 3745-17-11 and the maximum process weight rate of 380 tons per hour for this emissions unit, the allowable rate of particulate emissions is 65.7 pounds per hour. The allowable emission rate obtained from Figure II is less stringent than the allowable emission rate obtained from Table I of OAC rule 3745-17-11.
- 2.c** The existing emission capture system, consisting of a primary hood over the tap hole and trough area and a fixed local hood over the iron tilting running spouts, shall be maintained and employed in accordance with the following standard operating practices. When casthouse #1 is used, the main isolation valve from casthouse #2 shall be set for minimal flow, to achieve the maximum gas flow in the collection main from casthouse #1. The movable trough area hood must be lowered into proper position prior to each cast.
- 2.d** The existing emission capture system, consisting of a primary hood over the tap hole and trough area and a fixed local hood over the iron tilting runner spouts, shall be maintained and employed in accordance with the following standard operating practices. When casthouse #2 is used, the main isolation valve from casthouse #1 shall be set for minimal flow, to achieve the maximum gas flow in the collection main from casthouse #2. The movable trough area hood must be lowered into proper position prior to each cast.
- 2.e** Monitoring, record keeping, and reporting for the sulfur content is not required for blast furnace gas because it does not contain measurable quantities of sulfur compounds according to "Steam", 39th Edition, The Babcock & Wilcox Company, 1978, p.5-20, and "Air Pollution Engineering Manual", Air & Waste Management Association, 1992, p. 650.

II. Operational Restrictions

- 1.** The pressure drop across the casthouse baghouse shall be maintained within the range of 2 to 8 inches of water while the emissions unit is in operation. The pressure drop shall not be considered outside the normal range when the pressure drop falls below the minimum point in the pressure differential range as a result of bag replacements.

The permittee may petition the Northeast District Office for reestablishment of the pressure drop range at any time provided the permittee can demonstrate to the Northeast District Office that the operating conditions upon which the pressure drop range was previously established are not longer applicable.

II. Operational Restrictions (continued)

2. The scrubber water flow rate for the primary venturi scrubber shall be continuously maintained at a value of not less than 1000 gallons per minute at all times while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the casthouse baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the cast house baghouse on a daily basis.
2. The permittee shall properly operate and maintain equipment to continuously monitor the scrubber water flow rate for the primary venturi scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

The permittee shall collect and record the following information each shift while the scrubber is operating:

- a. the scrubber water flow rate, in gallons per minute; and
 - b. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the casthouses and charging operations. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

4. The permittee shall collect and record the following information for each day for this emissions unit:
 - a. the quantity of iron produced, in tons per hour; and
 - b. the hours of operation.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the pressure drop across the casthouse baghouse was not within the allowable range specified above.

IV. Reporting Requirements (continued)

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the scrubber water flow rate was not maintained at or above the required level.
3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the casthouses and charging operations and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions of fugitive dust from blast furnace charging shall not exceed twenty percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

Sulfur dioxide emissions from the stove stacks shall not exceed 740.3 lbs/hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission rate in accordance with 40 CFR Part 60, Appendix A, Methods 6 or 6C and the procedures in OAC rule 3745-18-04.

1.c Emission Limitation:

Visible particulate emissions from the blast furnace stove stacks shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:

Particulate emissions from the blast furnace stove stacks shall not exceed 65.7 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.e Emission Limitation:

Particulate emissions from the casthouse baghouse shall not exceed 0.030 lb/ton of iron produced.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(10).

1.f Emission Limitation:

Visible particulate emissions of fugitive dust from each casthouse shall not exceed twenty percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

1.g Emission Limitation:

Visible particulate emissions from the casthouse baghouse shall not exceed 20 percent opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months after issuance of this permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limits for particulate emissions from the baghouse.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60, Appendix A.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

V. Testing Requirements (continued)

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BOF Vessel #1 (P902)

Activity Description: Koppers Co. Basic Oxygen Furnace, includes: charging, refining/melting, tapping, slag splashing, tire/coal injection and deslagging.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Koppers Co. basic oxygen furnace (BOF) #1, equipped with a GAW damper and an electrostatic precipitator (ESP)	OAC rule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 861.8 lbs/hour.
	OAC rule 3745-17-11(B)(1)	Total particulate emissions from melting, refining, and slag blowing shall not exceed 60.1 pounds per hour. See A.I.2.c below.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack associated with this emissions unit shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
Basic oxygen furnace coal/tire injection and slag blowing/splashing	OAC rule 3745-31-05(A)(3) PTI 02-8955	Visible particulate emissions of fugitive dust from slag blowing/splashing and/or coal/tire injection shall not exceed five percent opacity from the BOF roof monitor as an average of the 15-second opacity readings over the slag blowing/splashing or coal/tire injection periods.
	OAC rule 3745-17-07(B)(1)	None. See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	None. See A.I.2.b below.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Basic oxygen furnace tapping	OAC rule 3745-17-07(B)(1)	None. See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	None. See A.I.2.b below.
Basic oxygen furnace charging	OAC rule 3745-17-07(B)(1)	None. See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	None. See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a** Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. Basic oxygen furnace #1 is not located within the areas identified in "Appendix A" of the rule.
- 2.b** Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. Basic oxygen furnace #1 is not located within the areas identified in "Appendix A" of the rule.
- 2.c** The particulate emissions limitation of 60.1 pounds per hour is based upon curve P-1 (equation b) in Figure II of OAC rule 3745-17-11 and an uncontrolled mass rate of emission of 7837.5 pounds per hour. The uncontrolled mass rate of emission was calculated using the maximum process weight rate of 275 tons per hour provided in the permit application and an emission factor of 28.5 pounds per ton for uncontrolled basic oxygen furnace (BOF) particulate emissions from AP-42, Table 12.5-1 (10/86). Based upon Table I in OAC rule 3745-17-11 and the maximum process weight rate for this emissions unit, the allowable rate of particulate emissions is 62 pounds per hour. Since the allowable rate obtained from Figure II is more stringent than the allowable rate obtained from Table I of OAC rule 3745-17-11, the allowable mass rate of particulate emissions from the BOF is 60.1 pounds per hour.
- 2.d** Permit to Install 02-8955 provided an allowable particulate emission rate of 0.21 pound per hour from slag blowing. Since actual particulate emissions from melting, refining, and slag blowing occur simultaneously, particulate emissions from the stack cannot be quantified by process. Therefore, compliance with the total allowable emission limitation of 60.1 pounds per hour will be used to demonstrate compliance with the allowable particulate emissions for melting, refining, and slag blowing.

II. Operational Restrictions

- To help ensure ongoing compliance with OAC rule 3745-17-11, the permittee shall operate the ESP in a manner that will ensure, while this emissions unit is in operation, that the manufacturer's set points for primary voltage and secondary voltage for each TR set are continuously met and that under-voltage conditions do not exist.

III. Monitoring and/or Record Keeping Requirements

- The permittee shall record the following information for each day: the ESP sections that are out of service and the duration of the downtime for each section, when the associated emissions unit was in operation.
- The permittee shall monitor and record the primary voltage and secondary voltage one time per day for each TR set within the ESP while the emissions unit is in operation.

The permittee shall maintain records of the primary voltage and secondary voltage set points and each time period during which this emissions unit was in operation and the ESP set point(s) was (were) not being met.

- No monitoring or record keeping is required for the sulfur dioxide emission limit for this emissions unit because the maximum uncontrolled emission rate of sulfur dioxide cannot exceed the allowable emission limit.

III. Monitoring and/or Record Keeping Requirements (continued)

4. The permittee shall perform one daily check for any visible fugitive particulate emissions, when the weather conditions allow, from the egress points (i.e., building windows, doors, roof monitors, etc.) of the building housing this emissions unit. This daily check shall be performed at a time that is representative of the typical activity of the several operations housed within this building (regardless of whether this specific unit is in operation). The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the location and color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- the color of the emissions;
 - whether the emissions are representative of normal operations;
 - if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - the total duration of any visible emission incident; and
 - any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during the operation of this emissions unit when the ESP was not in operation.

The deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

2. The permittee shall also submit quarterly reports that identify the sections of the ESP that were out of service along with the time period(s) involved.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each time period during which this emissions unit was in operation and the ESP set point(s) was (were) not being met.

IV. Reporting Requirements (continued)

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

Visible particulate emissions from the stack associated with this emissions unit shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

- 1.b Emission Limitation:

Visible particulate emissions from slag blowing/splashing and/or coal/tire Injection shall not exceed five percent opacity from the BOF roof monitor as an average of the 15-second opacity readings over the slag blowing/splashing or coal/tire injection periods.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

- 1.c Emission Limitation:

Particulate emissions from melting, refining, and slag blowing shall not exceed 60.1 pounds per hour from the stack associated with this emissions unit.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(10).

- 1.d Emission Limitation:

Sulfur dioxide emissions shall not exceed 861.8 lbs/hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission rate in accordance with 40 CFR Part 60, Appendix A, Methods 6 or 6C and the procedures in OAC rule 3745-18-04.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after issuance of this permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limit for particulate emissions.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60, Appendix A.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: BOF Vessel #2 (P903)

Activity Description: Koppers Co. Basic Oxygen Furnace, includes: charging, refining/melting, tapping, slag splashing, tire/coal injection and deslagging.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Koppers Co. basic oxygen furnace (BOF) #2 equipped with a GAW damper and an electrostatic precipitator (ESP)	OAC rule 3745-18-06(E)(1)	Sulfur dioxide emissions shall not exceed 861.8 lbs/hour.
	OAC rule 3745-17-11(B)(1)	Total particulate emissions from melting, refining, and slag blowing shall not exceed 60.1 pounds per hour. See A.I.2.c below.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack associated with this emissions unit shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
Basic oxygen furnace coal/tire injection and slag blowing/splashing	OAC rule 3745-31-05(A)(3) PTI 02-8955	Visible particulate emissions of fugitive dust from slag blowing/splashing and/or coal/tire injection shall not exceed five percent opacity from the BOF roof monitor as an average of the 15-second opacity readings over the slag blowing/splashing or coal/tire injection periods.
	OAC rule 3745-17-07(B)(1)	None. See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	None. See A.I.2.b below.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Basic oxygen furnace tapping	OAC rule 3745-17-07(B)(1)	None. See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	None. See A.I.2.b below.
Basic oxygen furnace charging	OAC rule 3745-17-07(B)(1)	None. See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	None. See A.I.2.b below.

2. Additional Terms and Conditions

- 2.a** Pursuant to OAC rule 3745-17-07(B)(11)(e), OAC rule 3745-17-07(B)(1) shall not apply to any fugitive dust source which is not located within the geographical areas identified in "Appendix A" of OAC rule 3745-17-08. Basic oxygen furnace #2 is not located within the areas identified in "Appendix A" of the rule.
- 2.b** Pursuant to OAC rule 3745-17-08(A)(1), OAC rule 3745-17-08(B) shall apply to any fugitive dust source which is located within the areas identified in "Appendix A" of the rule. Basic oxygen furnace #2 is not located within the areas identified in "Appendix A" of the rule.
- 2.c** The particulate emissions limitation of 60.1 pounds per hour is based upon curve P-1 (equation b) in Figure II of OAC rule 3745-17-11 and an uncontrolled mass rate of emission of 7837.5 pounds per hour. The uncontrolled mass rate of emission was calculated using the maximum process weight rate of 275 tons per hour provided in the permit application and an emission factor of 28.5 pounds per ton for uncontrolled basic oxygen furnace (BOF) particulate emissions from AP-42, Table 12.5-1 (10/86). Based upon Table I in OAC rule 3745-17-11 and the maximum process weight rate for this emissions unit, the allowable rate of particulate emissions is 62 pounds per hour. Since the allowable rate obtained from Figure II is more stringent than the allowable rate obtained from Table I of OAC rule 3745-17-11, the allowable mass rate of particulate emissions from the BOF is 60.1 pounds per hour.
- 2.d** Permit to Install 02-8955 provided an allowable particulate emission rate of 0.21 pound per hour from slag blowing. Since actual particulate emissions from melting, refining, and slag blowing occur simultaneously, particulate emissions from the stack cannot be quantified by process. Therefore, compliance with the total allowable emission limitation of 60.1 pounds per hour will be used to demonstrate compliance with the allowable particulate emissions for melting, refining, and slag blowing.

II. Operational Restrictions

- 1. To help ensure ongoing compliance with OAC rule 3745-17-11, the permittee shall operate the ESP in a manner that will ensure, while this emissions unit is in operation, that the manufacturer's set points for primary voltage and secondary voltage for each TR set are continuously met and that under-voltage conditions do not exist.

III. Monitoring and/or Record Keeping Requirements

- 1. The permittee shall record the following information for each day: the ESP sections that are out of service and the duration of the downtime for each section, when the associated emissions unit was in operation.
- 2. The permittee shall monitor and record the primary voltage and secondary voltage one time per day for each TR set within the ESP while the emissions unit is in operation.

The permittee shall maintain records of the primary voltage and secondary voltage set points and each time period during which this emissions unit was in operation and the ESP set point(s) was (were) not being met.

- 3. No monitoring or record keeping is required for the sulfur dioxide emission limit for this emissions unit because the maximum uncontrolled emission rate of sulfur dioxide cannot exceed the allowable emission limit.

III. Monitoring and/or Record Keeping Requirements (continued)

4. The permittee shall perform one daily check for any visible fugitive particulate emissions, when the weather conditions allow, from the egress points (i.e., building windows, doors, roof monitors, etc.) of the building housing this emissions unit. This daily check shall be performed at a time that is representative of the typical activity of the several operations housed within this building (regardless of whether this specific unit is in operation). The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

5. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during the operation of this emissions unit when the ESP was not in operation.

The deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

2. The permittee shall also submit quarterly reports that identify the sections of the ESP that were out of service along with the time period(s) involved.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each time period during which this emissions unit was in operation and the ESP set point(s) was (were) not being met.

IV. Reporting Requirements (continued)

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:

- 1.a Emission Limitation:

Visible particulate emissions from the stack associated with this emissions unit shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

- 1.b Emission Limitation:

Visible particulate emissions from slag blowing/splashing and/or coal/tire Injection shall not exceed five percent opacity from the BOF roof monitor as an average of the 15-second opacity readings over the slag blowing/splashing or coal/tire injection periods.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

- 1.c Emission Limitation:

Particulate emissions from melting, refining, and slag blowing shall not exceed 60.1 pounds per hour from the stack associated with this emissions unit.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03(B)(10).

- 1.d Emission Limitation:

Sulfur dioxide emissions shall not exceed 861.8 lbs/hour.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission rate in accordance with 40 CFR Part 60, Appendix A, Methods 6 or 6C and the procedures in OAC rule 3745-18-04.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months after issuance of this permit and within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limit for particulate emissions.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 5 of 40 CFR Part 60, Appendix A.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Blst Fce Pellet Ore Rcvng and Handling (P905)

Activity Description: Pellet ore unloading, transfer and screening prior to blast furnace charging (vented to 3 baghouses).

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Pellet/ore receiving and handling (including unloading, conveying, transfer, and screening), equipped with 3 baghouses	OAC rule 3745-31-05(A)(3) PTI 02-14116	<p>Particulate emissions from the baghouse outlet associated with pellet ore rail car unloading shall not exceed 0.015 pound per hour and 0.063 ton per year.</p> <p>Particulate emissions from the baghouse outlet associated with pellet ore transfer at the transfer station shall not exceed 0.016 pound per hour and 0.07 ton per year.</p> <p>Particulate emissions from the baghouse outlet associated with pellet ore screening shall not exceed 0.021 pound per hour and 0.092 ton per year.</p> <p>Fugitive particulate emissions from all operations associated with this emissions unit shall not exceed 7.3 tons per year. See A.I.2.a below.</p>
	OAC rule 3745-17-07(B)(1)	<p>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B)(1), 3745-17-07(A)(1), and 3745-17-08(B).</p> <p>Visible fugitive particulate emissions from any enclosures associated with this emissions unit shall not exceed twenty percent opacity as a three-minute average.</p>
	OAC rule 3745-17-08(B)	See A.I.2.b and A.I.2.c below.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from each baghouse outlet associated with pellet ore rail car unloading, pellet ore transfer at the transfer station, and pellet ore screening shall not exceed twenty percent opacity as a six-minute average.

2. Additional Terms and Conditions

- 2.a** The fugitive particulate emission limitation of 7.3 tons per year includes fugitive particulate emissions from the following operations: pellet ore rail car unloading, pellet ore conveying to the ore yard stacker (3 emission points), pellet ore transfer at the transfer station, pellet ore transfer from the yard belt to the stacker boom conveyor, pellet ore yard belt conveyor loading from the reclaim hopper and unloading from conveyor belt P3 to the pellet surge bin (2 emission points), pellet ore conveying from the yard belt conveyor to the surge bin (2 emission points), pellet ore transfer including conveyor belt unloading/loading through the screening station to the surge bin (2 emission points), and pellet ore screening.
- 2.b** Pellet ore rail car unloading, pellet ore transfer at the transfer station, and pellet ore screening operations shall be adequately enclosed and vented to baghouses. The enclosures shall be sufficient to eliminate or minimize, at all times, any visible emissions of fugitive dust from the enclosures.
- 2.c** Pellet ore conveying to the ore yard stacker, pellet ore transfer from the yard belt transfer to the stacker boom conveyor, pellet ore yard belt conveyor loading from the reclaim hopper and unloading from conveyor belt P3 to the pellet surge bin, pellet ore conveying from the yard belt conveyor to the surge bin, and pellet ore transfer from conveyor belt unloading/loading through the screening station to the surge bin operations shall be adequately enclosed. The enclosures shall be sufficient to eliminate or minimize, at all times, any visible emissions of fugitive dust from the enclosures.

II. Operational Restrictions

- 1.** The pressure drop across the baghouse associated with pellet ore rail car unloading shall be maintained within the range of 2 to 8 inches of water while pellet ore is being unloaded. The pressure drop shall not be considered outside the normal range when the pressure drop falls below the minimum point in the pressure differential range as a result of bag replacements.

The permittee may petition the Northeast District Office for reestablishment of the pressure drop range at any time provided the permittee can demonstrate to the Northeast District Office that the operating conditions upon which the pressure drop range was previously established are not longer applicable.

- 2.** The pressure drop across the baghouse associated with pellet ore transfer at the transfer station shall be maintained within the range of 2 to 8 inches of water while pellet ore is being transferred. The pressure drop shall not be considered outside the normal range when the pressure drop falls below the minimum point in the pressure differential range as a result of bag replacements.

The permittee may petition the Northeast District Office for reestablishment of the pressure drop range at any time provided the permittee can demonstrate to the Northeast District Office that the operating conditions upon which the pressure drop range was previously established are not longer applicable.

II. Operational Restrictions (continued)

3. The pressure drop across the baghouse associated with pellet ore screening shall be maintained within the range of 2 to 8 inches of water while pellet ore is being screened. The pressure drop shall not be considered outside the normal range when the pressure drop falls below the minimum point in the pressure differential range as a result of bag replacements.

The permittee may petition the Northeast District Office for reestablishment of the pressure drop range at any time provided the permittee can demonstrate to the Northeast District Office that the operating conditions upon which the pressure drop range was previously established are not longer applicable.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drops across the baghouses associated with pellet ore rail car unloading, pellet ore transfer at the transfer station, and pellet ore screening. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturers' recommendations, instructions, and operation manuals. The permittee shall record the pressure drops across each baghouse on a daily basis when material handling operations associated with each baghouse are occurring.
2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operated under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to eliminate the visible emissions.
4. The permittee shall collect and record, for each control system, the downtime of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.
5. The permittee shall maintain records of the quantity, by weight, of all materials processed in this emissions unit during each calendar year. The records may be maintained in computerized form.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the pressure drop across each baghouse associated with pellet ore rail car unloading, pellet ore transfer at the transfer station, and pellet ore screening was not within the allowable ranges specified above.
2. The permittee shall submit semiannual written reports which (a) identify all weeks during which any visible fugitive particulate emissions were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit semiannual written reports that (a) identify all weeks during which any visible particulate emissions were observed from any of the stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

Visible particulate emissions from the baghouse outlets associated with pellet ore rail car unloading, pellet ore transfer at the transfer station, and pellet ore screening shall not exceed twenty percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:

Particulate emissions from the baghouse outlet associated with pellet ore rail car unloading shall not exceed 0.015 pound per hour and 0.063 ton per year.

Applicable Compliance Method:

i. If required, compliance with the hourly emission limitation shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

ii. The following equation shall be used to demonstrate compliance with the annual particulate emission limitation for the baghouse outlet associated with pellet ore rail car unloading:

$$PE = \text{amt. of pellets/ore processed in tons/yr} \times 0.005 \text{ lb/ton} \times 0.85 \times 0.01 \times 1 \text{ ton}/2000 \text{ lbs}$$

Where

PE = particulate emission rate (tons/yr);

amt. of pellets/ore processed in tons/yr = the total amount of pellets/ore processed in this emissions unit annually, from Section A.III.4 (tons/yr);

0.005 lb/ton = emission factor for uncontrolled pellet unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.85 = the assumed capture efficiency;

0.01 = 1 - the assumed 99% control device efficiency; and

1 ton/2000 lbs = one ton per 2000 pounds.

V. Testing Requirements (continued)

1.c Emission Limitation:

Particulate emissions from the baghouse outlet associated with pellet ore transfer at the transfer station shall not exceed 0.016 pound per hour and 0.07 ton per year.

Applicable Compliance Method:

i. If required, compliance with the hourly emission limitation shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

ii. The following equation shall be used to demonstrate compliance with the annual particulate emission limitation for the baghouse outlet associated with pellet ore transfer at the transfer station:

$$PE = \text{amt. of pellets/ore processed in tons/yr} \times 0.005 \text{ lb/ton} \times 0.95 \times 0.01 \times 1 \text{ ton/2000 lbs}$$

Where

PE = particulate emission rate (tons/yr);

amt. of pellets/ore processed in tons/yr = the total amount of pellets/ore processed in this emissions unit annually, from Section A.III.4 (tons/yr);

0.005 lb/ton = emission factor for uncontrolled pellet unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.95 = the assumed capture efficiency;

0.01 = 1 - the assumed 99% control device efficiency; and

1 ton/2000 lbs = one ton per 2000 pounds.

V. Testing Requirements (continued)

1.d Emission Limitation:

Particulate emissions from the baghouse outlet associated with pellet ore screening shall not exceed 0.021 pound per hour and 0.092 ton per year.

Applicable Compliance Method:

i. If required, compliance with the hourly emission limitation shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

ii. The following equation shall be used to demonstrate compliance with the annual particulate emission limitation for the baghouse outlet associated with pellet ore screening:

$$PE = \text{amt. of pellets/ore processed in tons/yr} \times 0.0065 \text{ lb/ton} \times 0.95 \times 0.01 \times 1 \text{ ton}/2000 \text{ lbs}$$

Where

PE = particulate emission rate (tons/yr);

amt. of pellets/ore processed in tons/yr = the total amount of pellets/ore processed in this emissions unit annually, from Section A.III.4 (tons/yr);

0.0065 lb/ton = emission factor for uncontrolled pellet screening from AP-42, Section 13.2.4, Equation 1;

0.95 = the assumed capture efficiency;

0.01 = 1 - the assumed 99% control device efficiency; and

1 ton/2000 lbs = one ton per 2000 pounds.

V. Testing Requirements (continued)

1.e Emission Limitation:

Fugitive particulate emissions from all operations associated with this emissions unit shall not exceed 7.3 tons per year.

Applicable Compliance Method:

The following equation shall be used to demonstrate compliance with the annual particulate emission limitation from all operations associated with this emissions unit:

$$EA = ERCU + ECOY + ETTS + ETYB + ELU + ECYB + ETCB + EPS$$

Where

EA = total annual particulate emission rate from all operations (tons/yr).

ERCU = particulate emission rate from rail car pellets/ore unloading (tons/yr), calculated using the following equation:

$$\text{amt. of pellets/ore processed in tons/yr} \times 0.005 \text{ lb/ton} \times 0.15 \times 0.30 \times 1 \text{ ton/2000 lbs}$$

Where

amt. of pellets/ore processed in tons/yr = the total amount of pellets/ore processed in this emissions unit annually, from Section A.III.4 (tons/yr);

0.005 lb/ton = emission factor for uncontrolled pellet unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.15 = 15% fugitive PE with 85% capture efficiency;

0.30 = 1 - the assumed 70% building/enclosure capture efficiency; and

1 ton/2000 lbs = one ton per 2000 pounds.

V. Testing Requirements (continued)

ECOY = particulate emission rate from pellets/ore conveying to ore yard stacker (tons/yr), calculated using the following equation:

amt. of pellets/ore processed in tons/yr x 0.0011 lb/ton x 0.10 x 1 ton/2000 lbs x 3

Where

amt. of pellets/ore processed in tons/yr = the total amount of pellets/ore processed in this emissions unit annually, from Section A.III.4 (tons/yr);

0.0011 lb/ton = emission factor for uncontrolled pellet conveying from AP-42, Section 13.2.4, Equation 1;

0.10 = 1 - the assumed 90% building/enclosure capture efficiency;

1 ton/2000 lbs = one ton per 2000 pounds; and

3 = number of emission points for pellets/ore conveying to ore yard stacker.

ETTS = particulate emission rate from pellets/ore transfer at the transfer station (tons/yr), calculated using the following equation:

amt. of pellets/ore processed in tons/yr x 0.005 lb/ton x 0.05 x 0.10 x 1 ton/2000 lbs

Where

amt. of pellets/ore processed in tons/yr = the total amount of pellets/ore processed in this emissions unit annually, from Section A.III.4 (tons/yr);

0.005 lb/ton = emission factor for uncontrolled pellet unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.05 = 5% fugitive PE with 95% capture efficiency;

0.10 = 1 - the assumed 90% building/enclosure capture efficiency; and

1 ton/2000 lbs = one ton per 2000 pounds.

V. Testing Requirements (continued)

ETYB = particulate emission rate from pellets/ore transfer from yard belt conveyor to boom conveyor (tons/yr), calculated using the following equation:

amt. of pellets/ore processed in tons/yr x 0.005 lb/ton 0.20 x 1 ton/2000 lbs

Where

amt. of pellets/ore processed in tons/yr = the total amount of pellets/ore processed in this emissions unit annually in Section A.III.4 (tons/yr);

0.005 lb/ton = emission factor for uncontrolled pellets/ore unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.20 = 1 - the assumed 80% building/enclosure capture efficiency; and

1 ton/2000 lbs = one ton per 2000 pounds.

ELU = particulate emission rate from pellets/ore loading/unloading (tons/yr), calculated using the following equation:

amt. of pellets/ore processed in tons/yr x 0.005 lb/ton x 0.20 x 1 ton/2000 lbs x 2

Where

amt. of pellets/ore processed in tons/yr = the total amount of pellets/ore processed in this emissions unit annually, from Section A.III.4 (tons/yr);

0.005 lb/ton = emission factor for uncontrolled pellets/ore unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.20 = 1 - the assumed 80% building/enclosure capture efficiency;

1 ton/2000 lbs = one ton per 2000 pounds; and

2 = number of emission points for pellets/ore loading/unloading.

V. Testing Requirements (continued)

ECYB = particulate emission rate from pellets/ore conveying from yard belt to surge bin (tons/yr), calculated using the following equation:

amt. of pellets/ore processed in tons/yr x 0.0011 lb/ton x 0.10 x 1 ton/2000 lbs x 2

Where

amt. of pellets/ore processed in tons/yr = the total amount of pellets/ore processed in this emissions unit annually, from Section A.III.4 (tons/yr);

0.0011 lb/ton = emission factor for uncontrolled pellets/ore conveying from AP-42, Section 13.2.4, Equation 1;

0.10 = 1 - the assumed 90% building/enclosure capture efficiency;

1 ton/2000 lbs = one ton per 2000 pounds; and

2 = number of emission points for pellets/ore conveying from yard belt to surge bin.

ETCB = particulate emission rate from pellets/ore transfer from conveyor belt unloading/loading (tons/yr), calculated using the following equation:

amt. of pellets/ore processed in tons/yr x 0.005 lb/ton x 0.10 x 1 ton/2000 lbs x 2

Where

amt. of pellets/ore processed in tons/yr = the total amount of pellets/ore processed in this emissions unit annually, from Section A.III.4 (tons/yr);

0.005 lb/ton = emission factor for uncontrolled pellets/ore unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.10 = 1 - the assumed 90% building/enclosure capture efficiency;

1 ton/2000 lbs = one ton per 2000 pounds; and

2 = number of emission points for pellets/ore transfer from conveyor belt unloading/loading.

EPS = particulate emission rate from pellets/ore screening (tons/yr), calculated using the following equation:

amt. of pellets/ore processed in tons/yr x 0.0065 lb/ton x 0.05 x 0.10 x 1 ton/2000 lbs

Where

amt. of pellets/ore processed in tons/yr = the total amount of pellets/ore processed in this emissions unit annually, from Section A.III.4 (tons/yr);

0.006 lb/ton = emission factor for uncontrolled pellet unloading/transfer from AP-42, Section 13.2.4, Equation 1;

0.05 = 5% fugitive with 95% capture efficiency;

0.10 = 1 - the assumed 90% building/enclosure capture efficiency; and

1 ton/2000 lbs = one ton per 2000 pounds.

V. Testing Requirements (continued)

1.f Emission Limitation:

Visible fugitive particulate emissions from any enclosures associated with this emissions unit shall not exceed twenty percent opacity as a three-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the modifications listed in paragraph (B)(3)(b) of OAC rule 3745-17-03.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 Galvanizing Line (P906)

Activity Description: Wean Engineering continuous galvanizing line with coil welder, acid cleaning section, flux application, Ajax Magnothermic galvanizing kettle and N-G fired preheaters.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

- The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Wean Engineering, continuous galvanizing line, including acid cleaning section and flux application tanks, equipped with a wet scrubber, and Ajax Magnothermic galvanizing kettle, equipped with a baghouse, and natural gas fired preheaters	OAC rule 3745-17-11(B)(1)	Particulate emissions from the number 2 galvanizing line shall not exceed 46.8 pounds per hour. See A.1.2.e below.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the wet scrubber outlet shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
	40 CFR Part 63, Subpart CCC	Visible particulate emissions from the baghouse outlet shall not exceed twenty percent opacity as a six-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	HCl emissions from the wet scrubber outlet from the number 2 galvanizing line shall not exceed 18 parts per million by volume (ppmv). See A.1.2.a through A.1.2.d below.
		Visible fugitive particulate emissions from the number 2 galvanizing line shall not exceed twenty percent opacity as a 3-minute average from any building openings.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-17-08(B)(3)	The permittee shall employ reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust from the number 2 galvanizing line zinc coating pot. See A.I.2.f below.

2. Additional Terms and Conditions

- 2.a** The permittee shall achieve initial compliance with the requirements of 40 CFR Part 63, Subpart CCC, no later than June 22, 2001, for the acid cleaning section of the number 2 galvanizing line.
- 2.b** If the scrubber is not equipped with a viewport or access hatch allowing visual inspection, alternate means of inspection approved by the Ohio EPA Northeast District Office may be used.
- 2.c** The permittee shall initiate procedures for corrective action within 1 working day of detection of an operating problem with the acid cleaning section of the number 2 galvanizing line and/or the wet scrubber and complete all corrective actions as soon as practicable. Procedures to be initiated are the applicable actions that are specified in the maintenance plan. Failure to initiate or provide appropriate repair, replacement, or other corrective action is a violation of the maintenance requirement of 40 CFR Part 63, Subpart CCC.
- 2.d** The permittee shall maintain a record of each inspection of the acid cleaning section of the number 2 galvanizing line and the wet scrubber, including each item identified in Section A.III.3.iv, that is signed by the responsible maintenance official and that shows the date of each inspection, the problem identified, a description of the repair, replacement, or other corrective action taken, and the date of the repair, replacement, or other corrective action taken.
- 2.e** The particulate emissions limitation of 46.8 pounds per hour is based upon a process weight rate of 63 tons per hour and Table I of OAC rule 3745-17-11. If the emissions testing required for this emissions unit demonstrates that the allowable emissions rate from Figure II of OAC rule 3745-17-11 is more stringent than 46.8 lbs/hour, the permittee shall comply with the more stringent limitation.
- 2.f** The permittee shall employ reasonably available control measures that include the use of fans, and ductwork to adequately enclose, contain, and capture the particulate emissions, and vent the captured emissions to the baghouse. The collection efficiency of such equipment shall be sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.
- 2.g** The acid cleaning section and the flux application tanks of the galvanizing line shall be vented to a wet scrubber. The Ajax Magnothermic galvanizing kettle shall be vented to a baghouse.

II. Operational Restrictions

- 1. The wet scrubber water flow rate shall be continuously maintained at a value of not less than 56 gallons per minute at all times while the emissions unit is in operation.
- 2. The pressure drop across the baghouse shall be maintained within the range of 2 to 8 inches of water while the emissions unit is in operation. The pressure drop shall not be considered outside the normal range when the pressure drop falls below the minimum point in the pressure differential range as a result of bag replacements.

The permittee may petition the Northeast District Office for reestablishment of the pressure drop range at any time provided the permittee can demonstrate to the Northeast District Office that the operating conditions upon which the pressure drop range was previously established are not longer applicable.

II. Operational Restrictions (continued)

3. As required by section 63.6(e)(3) of 40 CFR Part 63, Subpart A, the permittee shall develop and implement a written startup, shutdown, and malfunction plan for the acid cleaning section of the number 2 galvanizing line that describes, in detail, procedures for operating and maintaining the emissions unit during periods of startup, shutdown, or malfunction, and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the 40 CFR Part 63, Subpart CCC.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor the water flow rate across the wet scrubber while the emissions unit is in operation. The monitoring device and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The monitoring device used to monitor the water flow rate across the wet scrubber shall be certified to be accurate to within 5 percent and shall be calibrated in accordance with the manufacturer's instructions but not less frequently than once per year.

The permittee shall collect and record the following information each shift while the wet scrubber is operating:

- a. the wet scrubber water flow rate, in gallons per minute; and
 - b. the operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.
2. The permittee shall maintain records for the acid cleaning section of the number 2 galvanizing line and the wet scrubber for 5 years from the date of each record of:
 - 2.a the occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
 - 2.b the occurrence and duration of each malfunction of the air pollution control equipment;
 - 2.c all maintenance performed on the air pollution control equipment;
 - 2.d actions taken during periods of startup, shutdown, and malfunction and the dates of such actions (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) when these actions are different from the procedures specified in the startup, shutdown, and malfunction plan;
 - 2.e all information necessary to demonstrate conformance with the startup, shutdown, and malfunction plan when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan;
 - 2.f all required measurements needed to demonstrate compliance with 40 CFR Part 63, Subpart CCC, and to support the data that the source is required to report, including, but not limited to, performance test measurements (including initial and any subsequent performance tests) and measurements as may be necessary to determine the conditions of the initial test or subsequent tests;
 - 2.g all results of initial or subsequent performance tests;
 - 2.h all documentation supporting initial notifications and notifications of compliance status; and
 - 2.i records of any applicability determination, including supporting analyses.

III. Monitoring and/or Record Keeping Requirements (continued)

3. The permittee shall implement an operation and maintenance plan for each emission control device by not later than the compliance date of June 22, 2001, in accordance with 40 CFR Part 63, Subpart CCC. The plan must be consistent with good maintenance practices and, for a scrubber emission control device, must at a minimum:
 - i. require monitoring and recording the pressure drop across the scrubber once per shift while the scrubber is operating in order to identify changes that may indicate a need for maintenance;
 - ii. require the manufacturer's recommended maintenance at the recommended intervals on fresh solvent pumps, and other liquid pumps, in addition to exhaust system and scrubber fans and motors associated with those pumps and fans;
 - iii. require cleaning of the scrubber internals at intervals sufficient to prevent buildup of solids or other fouling; and
 - iv. require an inspection of the scrubber at intervals of no less than 3 months with:
 - (a) cleaning or replacement of any plugged spray nozzles or other liquid delivery devices;
 - (b) repair or replacement of missing, misaligned, or damaged baffles, trays, or other internal components;
 - (c) repair or replacement of droplet eliminator elements as needed;
 - (d) repair or replacement of heat exchanger elements used to control the temperature of fluids entering or leaving the scrubber; and
 - (e) adjustment of damper settings for consistency with the required air flow.
4. In addition to the general records required in section A.III.2 of these terms and conditions, the permittee shall maintain records for the acid cleaning section of the number 2 galvanizing line and the wet scrubber for 5 years from the date of each record of:
 - a. scrubber makeup water flow rate and recirculation water flow rate;
 - b. calibration and manufacturer certification that monitoring devices are accurate to within 5 percent; and
 - c. each maintenance inspection and repair, replacement, or other corrective action.
5. The permittee shall keep the written operation and maintenance plan on record to be made available for inspection, upon request, by the Ohio EPA Northeast District Office for the life of the emissions unit or until the emissions unit is no longer subject to the provisions of 40 CFR Part 63, Subpart CCC. In addition, if the operation and maintenance plan is revised, the permittee shall keep previous (i.e., superseded) versions of the plan on record to be made available for inspection by the Ohio EPA Northeast District Office for a period of 5 years after each revision to the plan.
6. All records required by sections A.III.2 and A.III.4 of these terms and conditions for the most recent 2 years of operation must be maintained on site. Records for the previous 3 years may be maintained off site.
7. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse associated with the zinc coating pot while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

III. Monitoring and/or Record Keeping Requirements (continued)

8. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, conveyors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the location and color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and
 - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the wet scrubber water flow rate was not maintained at or above the required level.
2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse associated with the zinc coating pot was not within the allowable range specified above.
3. As required by section 63.10(d)(5)(i) of 40 CFR Part 63, Subpart A, the permittee shall submit the following reports:
 - a. If actions taken by the permittee during a startup, shutdown, or malfunction of the emissions unit (including actions taken to correct a malfunction) are consistent with the procedures specified in the startup, shutdown, and malfunction plan, the permittee shall state such information in a semiannual report. The report, to be certified by the owner or operator or other responsible official, shall be submitted semiannually and delivered or postmarked by the 31st day following the end of each calendar half.
 - b. Any time an action taken by the permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the permittee shall comply with all requirements of section 63.10(d)(5)(ii) of 40 CFR Part 63, Subpart A.
4. The permittee shall submit semiannual written reports which (a) identify all weeks during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, conveyors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA Northeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:

V. Testing Requirements (continued)

1.a Emission Limitation:

Particulate emissions from the number 2 galvanizing line shall not exceed 46.8 pounds per hour.

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

1.b Emission Limitation:

Visible particulate emissions from the wet scrubber outlet shall not exceed twenty percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:

Visible particulate emissions from the baghouse outlet shall not exceed twenty percent opacity as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.e Emission Limitation:

HCl emissions from the wet scrubber outlet from the number 2 galvanizing line shall not exceed 18 parts per million by volume (ppmv).

Applicable Compliance Method:

Compliance shall be determined through stack testing performed using the requirements established in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 26A.

1.f Emission Limitation:

Visible particulate emissions from the number 2 galvanizing line shall not exceed twenty percent opacity as a 3-minute average from any building openings.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted every 2.5 years in accordance with 40 CFR Part 63, Subpart CCC.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission limitation for HCl.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 26A of 40 CFR Part 60, Appendix A.
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.
 - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

3. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted during the first test for HCl following the effective date of this permit.
 - b. The emission testing shall be conducted at the outlets of the scrubber and baghouse to demonstrate compliance with the allowable mass emission limitation for particulates.
 - c. A particulate emissions test also shall be conducted at the inlet of the scrubber to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. A particulate emissions test also may be conducted at the inlet of the baghouse to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11, or the facility may use the previously established uncontrolled mass rate of emission of 85.25 lbs/hr.
 - d. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 through 4 and 5 and/or 26A of 40 CFR Part 60, Appendix A.
 - e. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

V. Testing Requirements (continued)

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA Northeast District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

4. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Northeast District Office.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 56" Hot Mill Roll Shop Cleaning Booth (R001)
Activity Description: Roll shop maintenace cleaning booth utilizing mineral spirits.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Roll shop maintenance cold cleaner utilizing mineral spirits or a comparable solvent	OAC rule 3745-21-09(O)(2)	See Section II. Operational Restrictions.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall equip the cold cleaner with either:
 - a. a cover; and if the solvent has a vapor pressure greater than 0.3 pound per square inch absolute measured at one hundred degrees Fahrenheit, or the solvent is heated or agitated, the cover shall be designed and constructed so that it can be easily operated with one hand; or
 - b. a remote solvent reservoir from which solvent is pumped through a nozzle suspended over a sink-like work area which drains back to the reservoir, provided the sink-like work area has an open drain area of less than sixteen square inches and provided the solvent neither is heated above one hundred degrees Fahrenheit nor has a vapor pressure greater than 0.6 pound per square inch absolute, measured at one hundred degrees Fahrenheit.
2. The permittee shall equip the cold cleaner with a device for draining the cleaned parts; and if the solvent has a vapor pressure greater than 0.6 pound per square inch absolute, measured at one hundred degrees Fahrenheit, the drainage facility shall be constructed internally so that parts are enclosed under the cover during draining unless an internal type drainage device cannot fit into the cleaning system.
3. The permittee shall install one of the following devices if the solvent vapor pressure is greater than 0.6 pound per square inch absolute measured at one hundred degrees Fahrenheit, or if the solvent is heated above one hundred twenty degrees Fahrenheit:
 - a. freeboard that gives a freeboard ratio greater than or equal to 0.7;
 - b. water cover (solvent must be inslouble in and heavier than water); or
 - c. other systems of equivalent control, such as refrigerated chiller or carbon adsorption, approved by the Ohio EPA Northeast District Office.

II. Operational Restrictions (continued)

4. The permittee shall operate and maintain the cold cleaner in accordance with the following practices to minimize solvent evaporation from the unit:
 - a. provide a permanent, legible, conspicuous label, summarizing the operating requirements;
 - b. store waste solvent in covered containers;
 - c. close the cover whenever parts are not being handled in the cleaner;
 - d. drain the cleaned parts until dripping ceases;
 - e. if used, supply a solvent spray that is a solid fluid stream (not a fine, atomized, or shower-type spray) at a pressure that does not exceed ten pounds per square inch gauge; and
 - f. clean only materials that are neither porous nor absorbent.
5. The permittee shall not employ halogenated solvents identified in 40 CFR Part 63, Subpart T, in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. Any owner or operator of a solvent metal cleaning operation shall maintain records of the following information in a readily accessible location for at least five years and shall make these records available to the Director upon verbal or written request:
 - a. all control equipment maintenance such as replacement of the carbon in a carbon adsorption unit;
 - b. for cold cleaners, the types of solvents employed, whether or not each solvent is a hazardous air pollutant, and the vapor pressure of each solvent (pounds per square inch absolute) measured at one hundred degrees Fahrenheit; and
 - c. the results of all emissions tests conducted, if required, to demonstrate compliance with the terms and conditions of this permit.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each day when a solvent that is a hazardous air pollutant was employed in this emissions unit.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Facility Name: **WCI Steel, Inc.**
Facility ID: **02-78-00-0463**

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